March, 1944
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Yachting

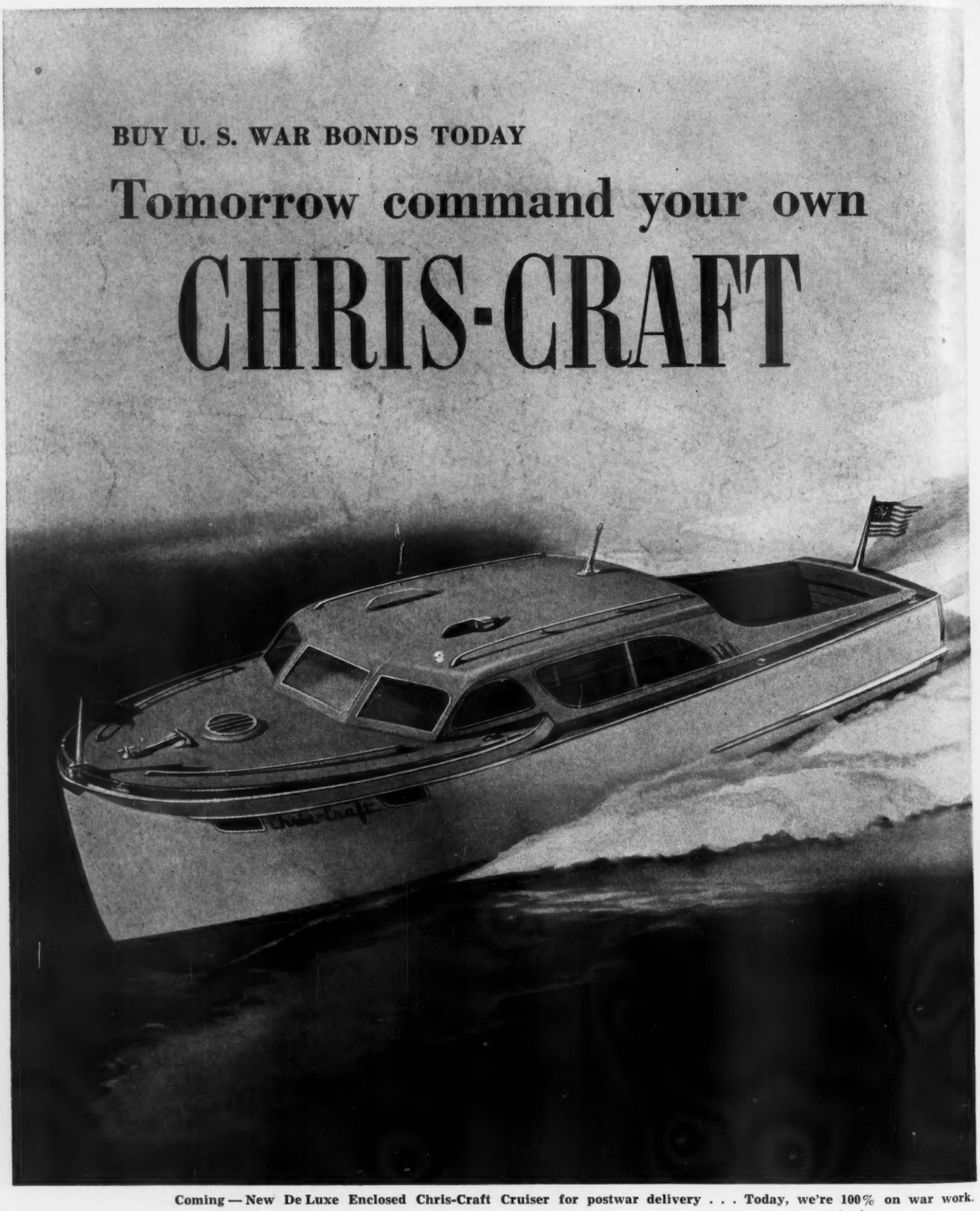
LESSONS OF THE OFFSHORE PATROL ☆ THE OUTBOARD HAS GONE TO WAR

KEEP THAT BOTTOM SMOOTH ☆ GADGETS AND GILHICKIES

BUY U. S. WAR BONDS TODAY

Tomorrow command your own

CHRIS-CRAFT



Coming — New De Luxe Enclosed Chris-Craft Cruiser for postwar delivery . . . Today, we're 100% on war work.

Keep Your Spirits High ☆ Speed Victory

ARMY E NAVY Algonac, Mich. ARMY E NAVY Cadillac, Mich. ARMY E NAVY Holland, Mich.

CHRIS-CRAFT

FOR PRODUCTION "WELL DONE"

CHRIS-CRAFT CORPORATION, ALGONAC, MICH. ★ WORLD'S LARGEST BUILDERS OF MOTOR BOATS

YACHTING, March, 1944. Vol. 75. No. 3. Published monthly at 10 Ferry Street, Concord, N. H. Editorial, Circulation and Advertising Offices, 205 East 42nd Street New York 17, N. Y. $4.00 a year, 50 cents a copy. Entered as Second-Class matter at the Post Office at Concord, N. H., under the Act of March 3, 1879.

Lace for a Lady

Those ammunition links represent plenty of American ingenuity and production skill . . .

In the jungle heat, your armorer loaded the deadly "lace" aboard your P-38. Now, escorting bombers you're headed for Rabaul.

Then—out of nowhere—Zeros!

You pick yours—as you press the firing button, the yellow ribbon of linked cartridges feeds into your nose guns. There's never a hitch as you pour it on at the rate of 900 shells a minute.

Yes, from cartridge links to bombers, our fighters are getting the finest!

★ ★ ★

If a fighter's guns jam, he's really in trouble. To minimize this possibility engineers of the Spring Division of Borg-Warner have been hard at work on machine gun and cannon link problems since Pearl Harbor. In co-operation with Army engineers they have developed four new links and had an active part in the Army's program which now produces a .50 calibre link of vastly improved performance. The Spring Division of Borg-Warner produces various size links by the million.

To the making of these precision links and over 100 other war items, we apply the idea that is basic with Borg-Warner: "design it better—make it better."

Your industry has felt the benefits of this idea through every Borg-Warner product ever supplied to you. Upon this well-proved confidence we hope to build an even closer association in the days ahead.

Partners with the Marine industry in peace and war, Borg-Warner supplies these and other essential parts . . .

BILGE PUMPS · CARBURETORS
CHAIN AND GEAR TRANSFER DRIVES · FUEL PUMPS
CHAIN HOISTS · MARINE COUPLINGS
REDUCTION AND REVERSE GEARS
MARINE SUPERCHARGERS
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ENGINEERING B-W PRODUCTION

BORG-WARNER

Peacetime makers of essential operating parts for the automotive, aviation, marine and farm implement industries, and of Norge home appliances . . . *these units which form the Borg-Warner Corporation are today devoted exclusively to the needs of war:* BORG & BECK • BORG-WARNER INTERNATIONAL • BORG-WARNER SERVICE PARTS • CALUMET STEEL • DETROIT GEAR AIRCRAFT PARTS • INGERSOLL STEEL & DISC • LONG • MARBON • MARVEL-SCHEBLER CARBURETER • MCCULLOCH ENGINEERING • MECHANICS UNIVERSAL JOINT • MORSE CHAIN • NORGE • NORGE MACHINE PRODUCTS • PESCO • ROCKFORD CLUTCH • SPRING DIVISION • WARNER AUTOMOTIVE PARTS • WARNER GEAR

FOSTER BOAT CO.

SHIPBUILDERS

CHARLEVOIX • *The Beautiful* • MICHIGAN

March, 1944

Dear Friends:

My Board of Directors has just overruled me.

Your response to these letters has been so enthusiastic . . . and your inquiries so numerous . . . that it was my wish to give you this month a picture of what has come off our drafting boards . . . a glimpse of your "DREAM BOAT".

But they voted me down.

"Of course," they said, "we'd like to release pictures . . . just as much as you would. We're mighty proud of this model. It's the most seaworthy, easiest riding, sleekest, and, above all, the roomiest design we can imagine. It includes every innovation of proven merit. We'd like nothing better than to show it to all lovers of fine boats. BUT . . . we're fighting the war right here on the production front -- and, in one way or another, so are all good Americans. Neither we nor they can afford to be diverted from the task at hand -- that of rushing top-notch equipment to our fighting forces. Can't you ask our readers to wait just a little longer? Surely they'll understand."

Well . . . they're right. We do have a big job to do yet, and we're working hard at it. But we're preparing for the day after VICTORY too. So keep right on mailing your inquiries. They'll be gratefully acknowledged. And as soon as possible, I'll see that complete details are sent you.

Yours, for an early and lasting Peace.

Sincerely,

H G Foster

President

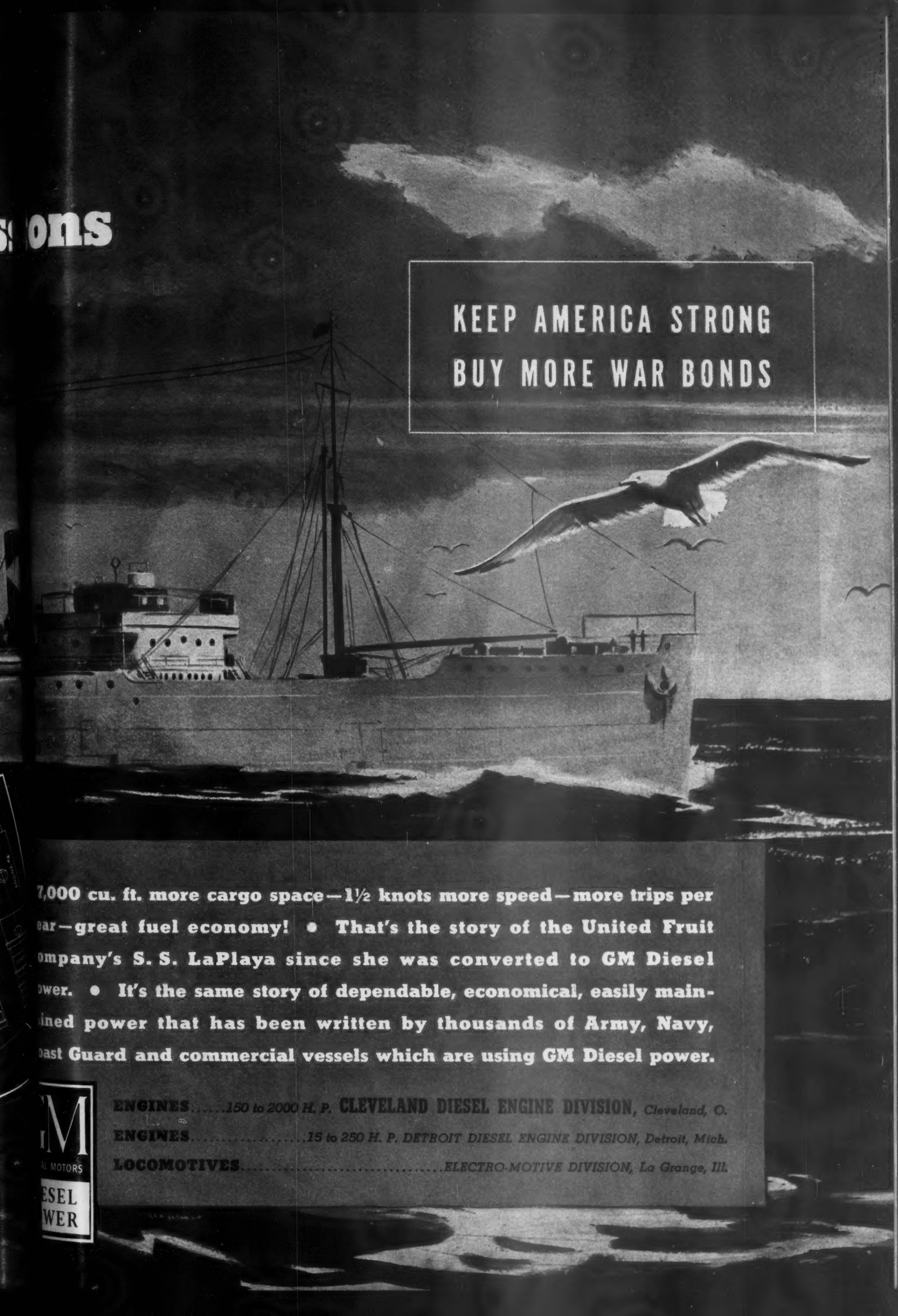
A LANDING BARGE glides silently through the ghostly greyness of early dawn. Golden-red beams of sunrise lightly touch the young marine's grim face. Now dark masses of shore suddenly appear through the clinging curtain of the morning mists. Soon — only seconds now — the thunder of a rolling barrage will shatter the eerie silence.

But the young marine isn't thinking of the furious hand-to-hand fighting so soon to come. Sure he knows that many of his comrades — perhaps he himself — will die this day. But instead his thoughts are back home. With Pa and Ma. And Doris! Unconsciously his fingers caress her last letter. As he thinks of what life will be for him when — if —

Peace. Yes. But after that last shot fired against tyranny and perfidy, only freedom and understanding and tolerance for all — from all — will make it a real peace . . . a long-lasting peace . . . a secure peace. But he's fighting for more than that. The blood to be shed must buy a better life . . . a happy complete life for Doris and the little ones . . . and for his brothers in the far flung corners of the earth . . . *Then Suddenly . . . The Barrage . . .*

PARAGON GEAR WORKS, INC., TAUNTON, MASS.
TRANSMISSIONS FOR MARINE INTERNAL COMBUSTION ENGINES

FOUND! 270 extra gros



7,000 cu. ft. more cargo space—1½ knots more speed—more trips per ear—great fuel economy! • That's the story of the United Fruit ompany's S. S. LaPlaya since she was converted to GM Diesel ower. • It's the same story of dependable, economical, easily main-ined power that has been written by thousands of Army, Navy, oast Guard and commercial vessels which are using GM Diesel power.

ENGINES.....*150 to 2000 H. P.* **CLEVELAND DIESEL ENGINE DIVISION,** *Cleveland, O.*

ENGINES.....*15 to 250 H. P. DETROIT DIESEL ENGINE DIVISION, Detroit, Mich.*

LOCOMOTIVES.....*ELECTRO-MOTIVE DIVISION, La Grange, Ill.*

AL MOTORS
ESEL
WER

new words to conjure . . .

With a brave new world to conquer when the smoke of battle clears—there are brave new words to conjure . . . to dream . . . to develop for the ultimate benefit of all mankind—the free and the oppressed, the victorious and the spoilers. Thousands of new ideas, new products, new conveniences . . . will make our tomorrow livable beyond our fondest expectations . . . will make life, in this world of tomorrow, sensational and thrilling.

Tomorrow—IPIK PLYWOOD will find its way into your home in beautifully finished exterior and interior wall panels and flush-type doors . . . into your boat with its battle-tested Marine Plywood, water-proof, weather-proof, heat-proof

So add to your vocabulary important new words . . . IPIK TEGO-BONDED PLYWOOD!

IPIK

GUM ★ POPLAR ★ MAHOGANY

IPIK PLYWOOD COMPANY

1833 Canal Building, New Orleans ★ FACTORY, Kenner, La.

Speed for Victory

Since 1863—pioneers in the design and construction of high-speed, victory-winning pleasure and Naval craft.

Now building PT's for the Navy and Aircraft Rescue Boats for the Army.

U. S. S. STILETTO — 1885

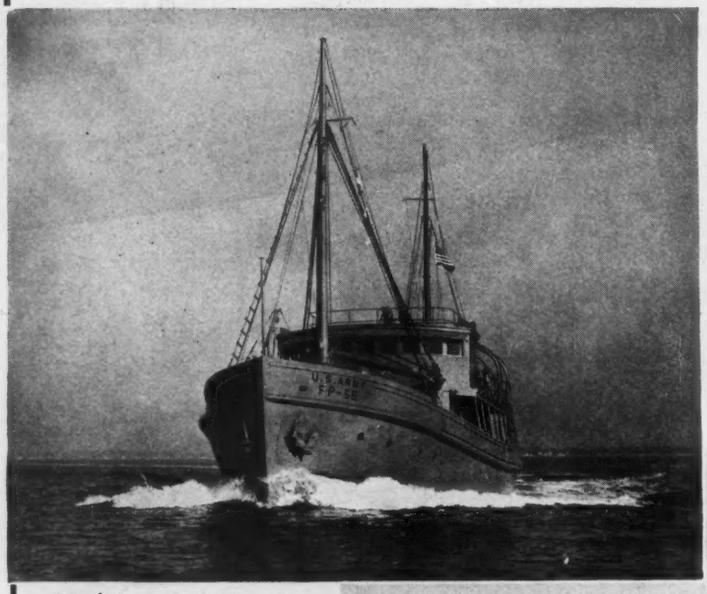
Keep on Buying WAR BONDS

Herreshoff

BRISTOL, RHODE ISLAND

CASEY AUXILIARIES

WAR-TIME VERSION



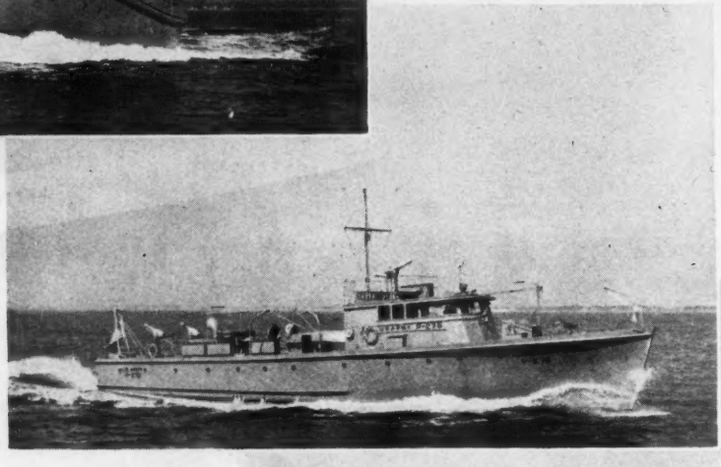
114′ Army Freight and Passenger Vessel

HERE'S WHAT WE'RE FIGHTING FOR

The Yachtsman's FIFTH FREEDOM—

which means that we'll be able to use our boats when we want to—and to sail them wherever we may plot our courses. We at Casey are doing our work towards this now by building for the armed services, but we'll be building boats for you one day again.

When you're planning for your new auxiliary, be sure to write for our circulars describing our 36, 39 and 45 footers. "CASEY BOATS ARE RARELY OFFERED FOR SALE—THEY SELL THEMSELVES"



104′ Army Aircraft Rescue Boat

Buy War Bonds and Stamps

65′ Army Cargo Boat

Watch for our advertisement for the newly designed 50′ Casey auxiliary—designed for ocean racing with the Bermuda Race in mind.

CASEY BOAT BUILDING COMPANY, INC.

Fairhaven, Massachusetts

GETTING SET TO

"Squeeze the Pickle"

Just imagine
you're at periscope depth
in a sub . . . waiting . . . ready
to "squeeze the pickle"—
the torpedo's firing button.

Down here
you're depending upon
practically a 100% electrical mechanism.

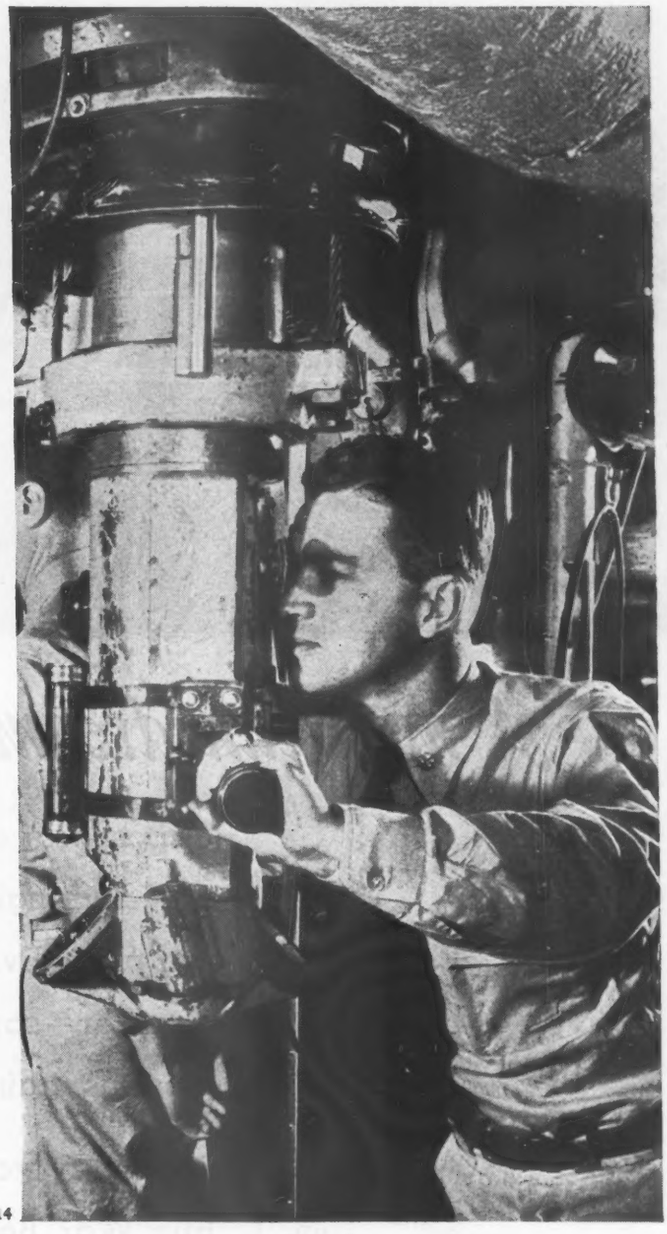
The "pickle"
is an electrical trigger.
Propulsion—ventilation—refrigeration—
range calculators—sound equipment—
radio—instruments—motors and control—
all operate electrically.

Even the skipper's orders
and "play-by-play" description
of battle are transmitted over
electrical communications systems.

Down here
the crew . . . efficient and eager
count upon electrical equipment
being dependable . . . accurate.

Westinghouse sub equipment
includes a complete line
of propulsion and electrical equipment
all pretested for your requirements.

So when you buy Westinghouse
you buy pretested dependability
built into each marine product.
And when you call Westinghouse
you save time . . . simplify ordering . . .
centralize responsibility
for design and installation
of steam and electrical equipment
for any ship.



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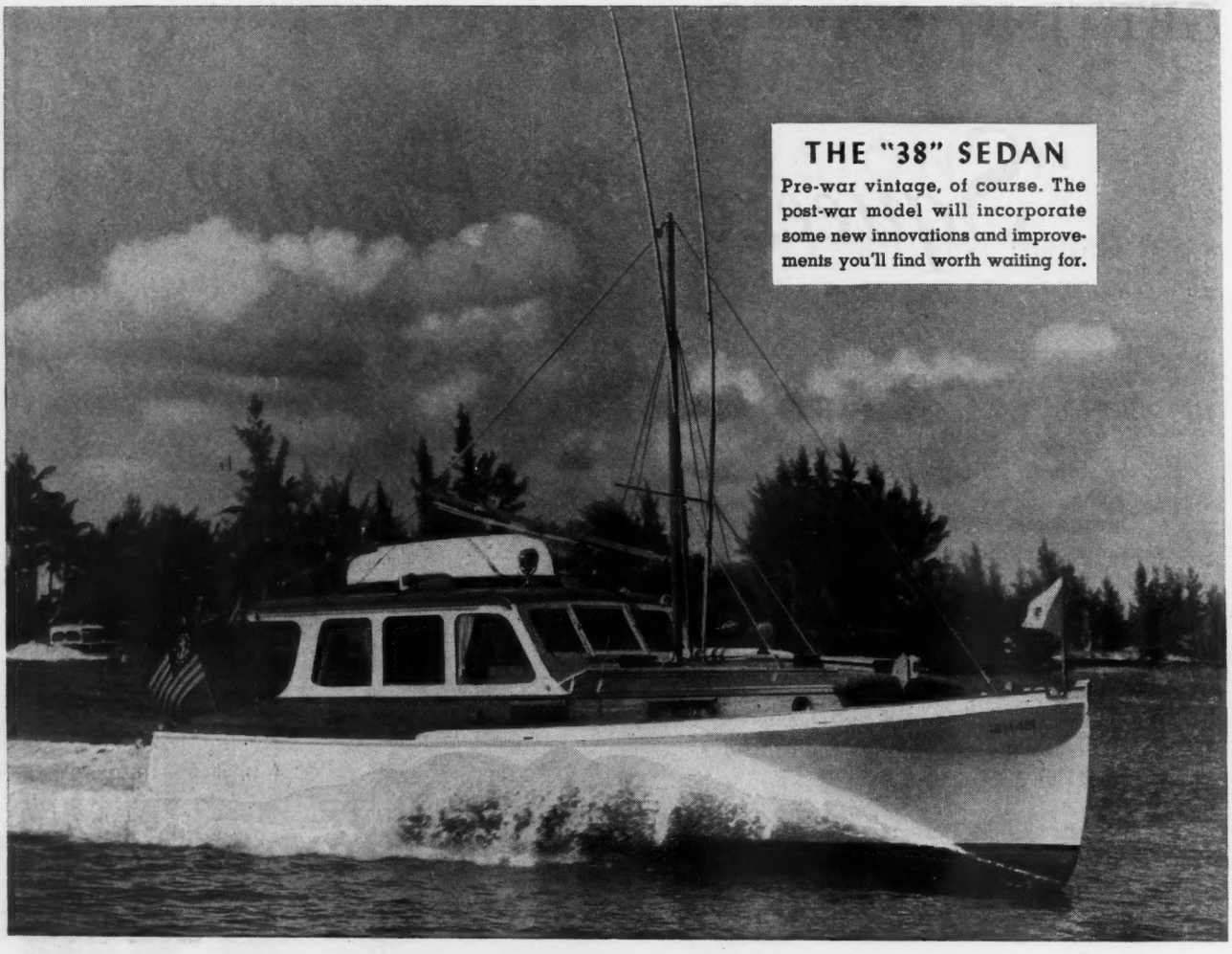
Westinghouse
PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE

THE MARINE INDUSTRY'S HEADQUARTERS FOR STEAM AND ELECTRICAL EQUIPMENT



THE "38" SEDAN
Pre-war vintage, of course. The post-war model will incorporate some new innovations and improvements you'll find worth waiting for.

A man can dream, can't he . . .

of post-war days—a well-deserved rest from nerve-wrangling production battles—a healthy tan from living aboard his own Matthews Cruiser—somewhere on America's many glorious cruising waters.

Some day you can realize your dream if you buy War Bonds to your limit each month.

In Miami, Fla.
MATTHEWS CRUISERS, INC.
has moved to
new quarters at
1845 BISCAYNE BLVD.

THE MATTHEWS CO.
PORT CLINTON • OHIO

"Wherever you cruise . . . you'll find a Matthews"

A THREE TIME WINNER...

For the second consecutive time a star has been added to the coveted Army-Navy "E" flag award to Panish Controls. This outstanding record is a tribute to the amazing performance of these controls under the most trying combat conditions and to the production record set by the company.

Reports from men who command boats equipped with this combination reverse gear and throttle control, praise its adaptability to close quarter maneuvers and the speed and precision with which these maneuvers are executed. Coast Guard officers, in from convoy patrol, tell thrilling stories of their experiences and the important part the Panish Control system played in their work. Their reports pay high tribute to the fine job we are doing here.

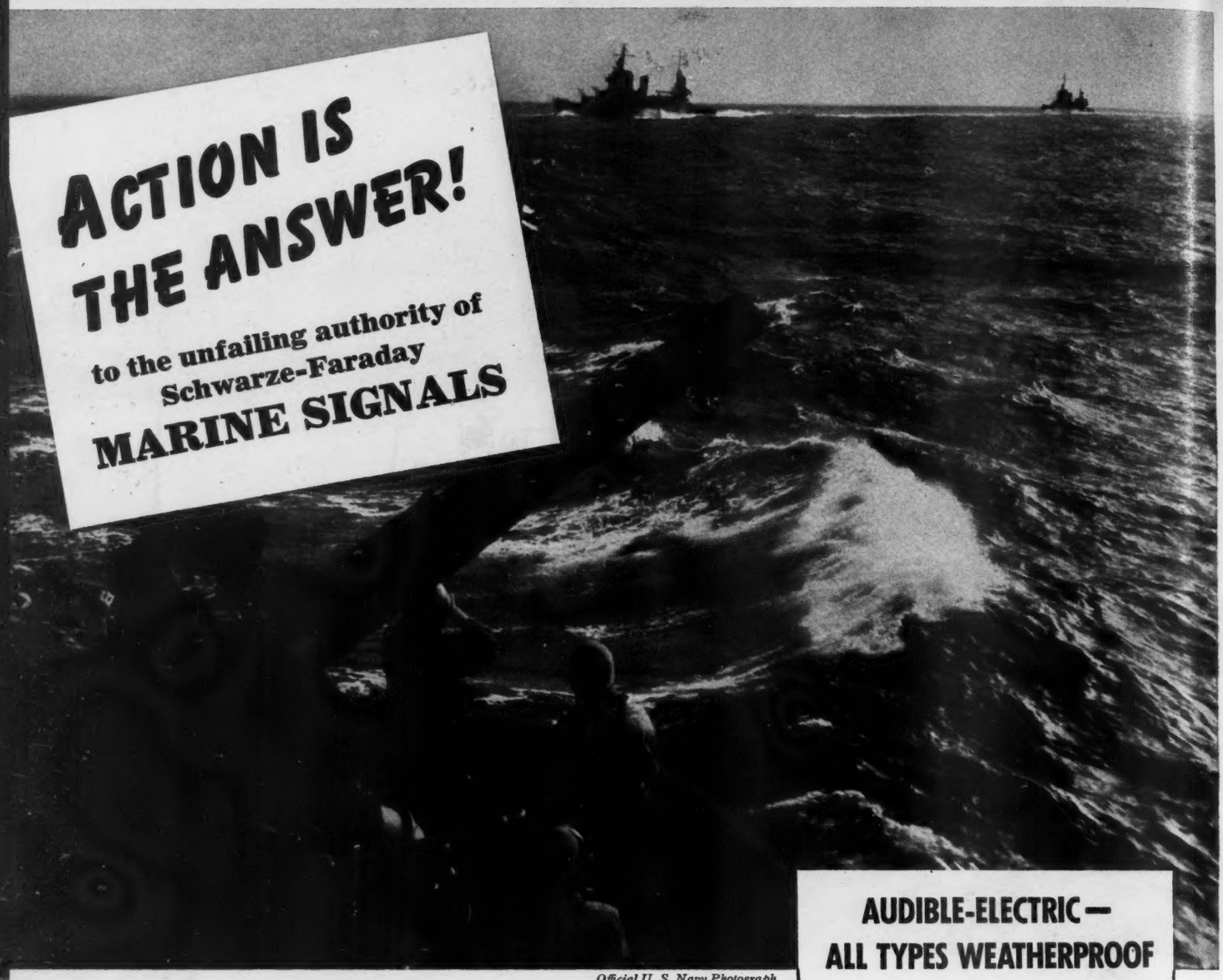
Absolutely foolproof in operation, this remarkable control involving an entirely new operating principle, completely eliminates all the difficulties heretofore connected with remote reverse gear controls, making it without a doubt one of the most important developments in the marine field to come out of this war. Panish Controls require no auxiliary equipment and present no installation or maintenance problems. They are not in any way affected by extreme changes of temperature or adverse weather conditions.

We shall continue to exert all our energy to the production of this fine equipment until our enemies are beaten to their knees. Then, in the days to follow, we will make Panish Controls for your boat and you too will have the finest reverse gear and throttle control made.

ARMY E NAVY

PANISH CONTROLS

BRIDGEPORT 5 • • CONNECTICUT



ACTION IS THE ANSWER!

to the unfailing authority of
Schwarze-Faraday
MARINE SIGNALS

Official U. S. Navy Photograph

SCHWARZE FARADAY

Horns, Bells, Buzzers of advanced design— Infallible under the most exacting conditions

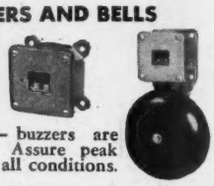
SCHWARZE-FARADAY Navy and Merchant Marine type signals are completely dependable under the toughest conditions—even exceeding the rigid wartime specifications for durability and performance. All are watertight, remarkably easy to install, and constructed from advanced designs that save critical materials.

The complete Schwarze-Faraday line includes signals to fit every requirement of type, tone or style. In addition to those at the right, there are Cow Bells and Chimes, Air Trumpets, the famous Uni-pact Kodaire, Standard Kodaires, and Marine Panels and Push Buttons.

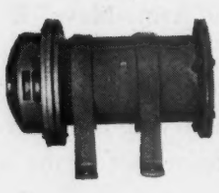
Send for FREE complete catalog—Schwarze-Faraday Marine Signals are now proving their superiority at war. Prepare for the time when they will be available for peacetime use by sending for Schwarze-Faraday Marine Signal Catalog No. 43M.

AUDIBLE-ELECTRIC— ALL TYPES WEATHERPROOF

MARINE BUZZERS AND BELLS



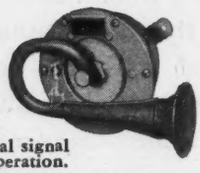
Design, construction and performance meet or exceed specifications of U. S. Merchant Marine. Clear, distinct bell tones — buzzers are sharp and strong. Assure peak performance under all conditions.



MARINE SIRENS

Made in two types, low pitch and high pitch—for AC and DC operation. Dependable performance—highest quality construction.

MARINE HORN



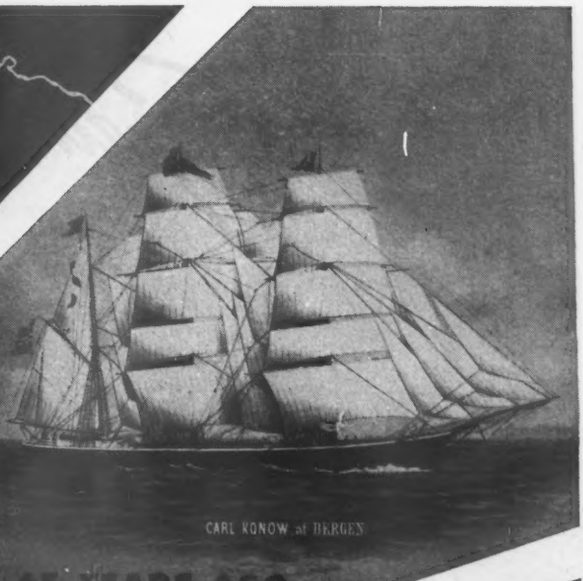
Heavy-duty, high power air blast signal for coding and general alarm use. Leads the field in high-power electrical signal horns. AC and DC operation.

SCHWARZE ELECTRIC COMPANY

ADRIAN, MICHIGAN

108 YEARS AGO
at Bergen, Norway, J. Trumpy – designer and builder of sailing vessels – established the first Trumpy shipyard.

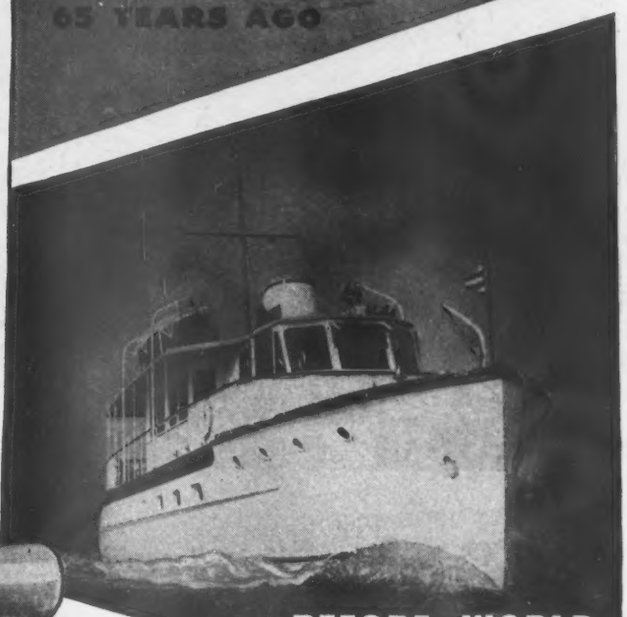
65 YEARS AGO
J. Trumpy & Son, at Bergen, built the Carl Konow, shown at top right.



42 YEARS AGO, John Trumpy – trained in his father's yard – came to America. Became Co-founder and Naval Architect of the Mathis Yacht Building Company. Later, founder of its successor

JOHN TRUMPY & SONS
Gloucester City, New Jersey

– engaged 100% on naval work today – to speed the day when their long experience and enlarged facilities will be at your service.



AFTER THE WAR–

JOHN TRUMPY & SONS, INC.

GLOUCESTER CITY, formerly MATHIS YACHT BUILDING CO. NEW JERSEY

"Grind that crank, Sailor"—

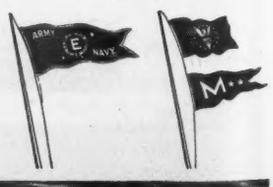
"The glass was falling all morning and it looks like we're in for a hard blow! So keep on grinding, sailor—that radio is our one hope of getting back alive!"

* * *

"U. S. sailors rescued at sea!" Behind these thrilling words you will often find the amazing little Radiomarine Radio Sending and Receiving Set. Standard equipment on many lifeboats today, it sends SOS messages out across the ocean with power generated by hand, with a crank. Morse code and even telephone messages may be sent and received on this marvelous life-saving "radio station"—created by Radiomarine.

This is but one of the many types of radio-electronic equipment being made by Radiomarine to safeguard ships at sea and the lives of those who sail them.

The entire facilities of Radiomarine Corporation of America, including its service stations at twenty-one ports, are totally mobilized for war and are engaged in equipping merchant ships and the ships of our armed forces with complex radio-electronic installations required in fighting a global war . . . When victory is ours, the improved radio-electronic equipment developed for this purpose will be made available for all vessels—from pleasure craft to luxury liners. Radiomarine Corporation of America, 75 Varick Street, New York, N. Y.



RCA RADIOMARINE CORPORATION OF AMERICA

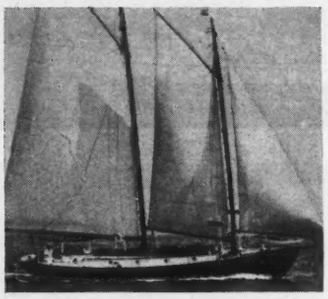
A SERVICE OF RADIO CORPORATION OF AMERICA

John G. Alden

Naval Architect

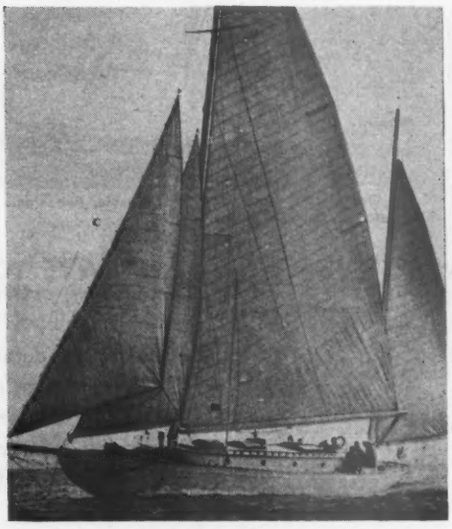
131 State St., Boston, Mass.

Tel.: CAPitol 9480



No. 207 — Gaff rigged schooner, 42′ x 33′ x 11′ 3″ x 6′ 2″. Alden design, Red Wing motor. Galley aft, three berths in cabin, toilet amidships, stateroom forward with very large double berth. Boat has been very well kept up and believe in fine shape. Has been to Bermuda. Laid up near Marblehead.

No. 3166 — Able, high-grade ketch, built of best materials, 1937. Crocker design, lead ballast, 30 h.p. Gray motor. 40′ 3″ over all, 32′ water line, 11′ beam, 5′ 6″ draft. Sails only used one summer, older set. Very large double stateroom forward, toilet amidships, galley aft. In fine condition. Price $10,000 firm. Laid up near Boston.



No. 2490 — Cruising yawl, 56′ x 37′ x 14′ x 7′ 10″. Gray 55 h.p. 6-cylinder motor, new 1941. In 1942 entire boat completely reconditioned with new rig, sails. Sleeps seven aft with double stateroom. Price low. Laid up at Marblehead.

No. 4058 — Auxiliary ketch, 35¼′ over all, 30′ water line, 11⅓′ beam, 5½′ draft. Heavily built of best materials, 18 h.p. Red Wing motor. Sleeps four in two compartments, galley aft. Laid up at Marblehead.

No. 506 — Cruising cutter, 32′ over all, 26′ 6″ water line, 9′ 7″ beam, 5′ draft. Outside lead ballast, teak trim on deck. Has hollow spars, roller reefing main and roller jib, two sets of sails. Motor thoroughly overhauled and hull repaired 1943 but not used. Double stateroom forward, toilet amidships, galley aft. Laid up at Boston.

SPARKMAN & STEPHENS

INCORPORATED

NAVAL ARCHITECTS

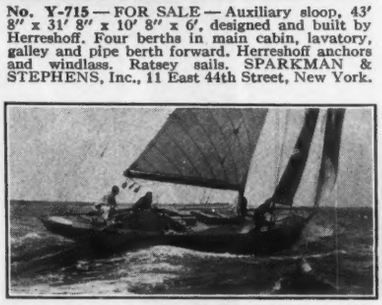
YACHT BROKERS

MARINE INSURANCE

11 EAST 44TH ST. NEW YORK

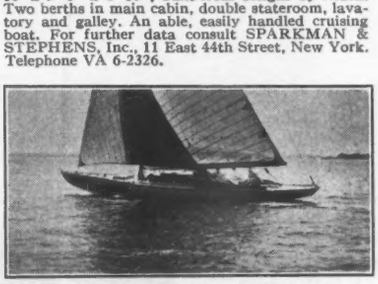
No. Y-715 — FOR SALE — Auxiliary sloop, 43′ 8″ x 31′ 8″ x 10′ 8″ x 6′, designed and built by Herreshoff. Four berths in main cabin, lavatory, galley and pipe berth forward. Herreshoff anchors and windlass. Ratsey sails. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York.

No. Y-8188 — FOR SALE — Auxiliary ketch 34′ x 30′ x 9′ 6″ x 4′ 10″, built from designs by Alden. Two berths in main cabin, double stateroom, lavatory and galley. An able, easily handled cruising boat. For further data consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. Telephone VA 6-2326.



No. Y-7460 — FOR SALE — Auxiliary sloop, 58′ 10″ x 36′ x 10′ 5″ x 7′ 5″. Two berths in main cabin, double stateroom, lavatory and galley. Sail inventory includes storm jib and trysail. For further data, price and location consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. Telephone VA 6-2327.

No. Y-7750 — FOR SALE — Diesel cutter 63′ 5″ x 44′ x 14′ x 8′ 6″, built in 1938 from our designs. Four berths in main cabin, double and single staterooms provide sleeping accommodations for seven. Teak decks, Everdur fastenings, Nevins' Spars. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. Telephone VA 6-2327.



No. Y-7245 — FOR SALE — Auxiliary sloop 46′ 4″ x 31′ 10″ x 9′ 2″ x 6′. One of the last boats built from Mr. "Nat" Herreshoff's personal designs. Four berths in main cabin, two in fo'castle provide sleeping accommodations for six. Smart under sail. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. Telephone VA 6-2326.

No. Y-6033 — FOR SALE — Hand designed auxiliary schooner, 55′ 4″ x 42′ x 14′ 3″ x 7′ 4″. Four berths in main cabin, large double stateroom, two lavatories, galley, etc. A fine husky cruising boat. For further data, price and location consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. Telephone VA 6-2325.

No. Y-8627 — FOR SALE — 45′ W.L. Auxiliary yawl, built to Cruising Rule by Nevins, 1939, our designs, without regard to expense. Equipment includes Dural mast, feathering propeller, radio direction finder, Kenyon, Ratsey sails and Bendix controls. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. Telephone VA 6-2327.

No. Y-8506 — FOR SALE — Shoal draft auxiliary yawl 59′ 6″ x 42′ x 14′ 2″ x 5′ 10″, built from our designs. Four berths in main cabin, double stateroom, lavatory, galley. Teak decks. Comfortable and smart to sail. Consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. Telephone VA 8-2327.

JOHN·H·WELLS

·515 MADISON AVENUE·
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·NEW YORK 22·

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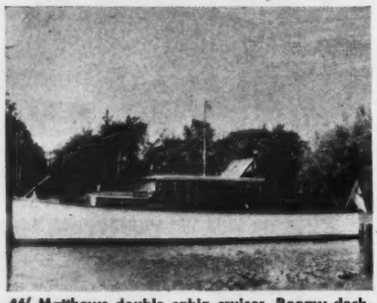
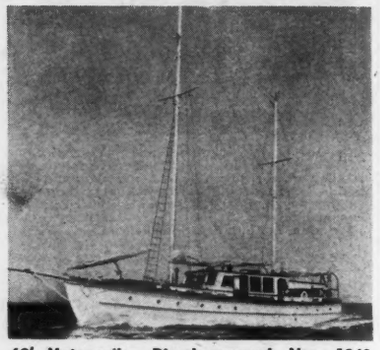


46′ Matthews double cabin cruiser. Roomy deckhouse and Flying bridge. Dual controls. Speed 16–18 m.p.h.

53′ Elco cruiser. New 1938. One double, two single staterooms. Speed 17 m.p.h.



62′ Motor-sailer. Diesel powered. New 1940. Sleeps eight in owner's party.

A FEW LISTINGS WHICH WE HAVE TO OFFER

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50′ and 56′ Elco cruiser.....	
50′ Vinyard cruiser, new 1936.....	$8,500
38′ Matthews sedan cruiser, new 1939...	$9,500
42′ Huckins Diesel cruiser, new Superior-Diesel 1941.....	$12,000

SAIL

38′ Marconi cutter, new 1939.....	$8,500
12-Metre sloop, new 1928.....	$9,200
50′ Alden schooner, new 1928.....	$10,000
46′ Alden schooner, new 1926.....	$15,000
55′ Yawl, new 1930, Great Lakes.....	$15,000
33′ Alden ketch, new 1929.....	$3,300

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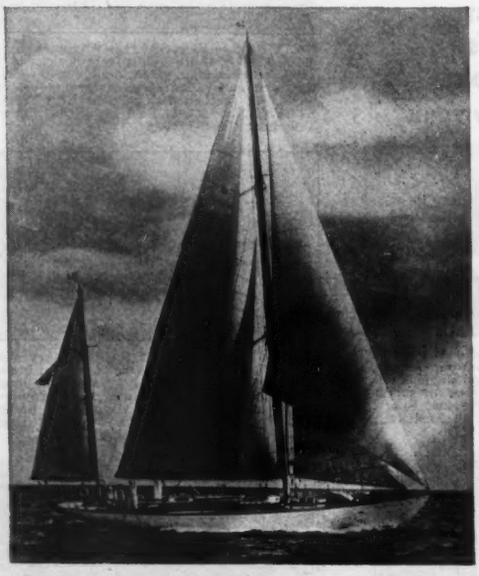
YACHT BROKERS *Telephone* HUBbard 2910 NAVAL ARCHITECTS



No. 5243—One of the few modern keel and centerboard yawls available. Built 1938 to highest specifications. Sleeps six in owner's party, two in crew. Yacht has been used very little, A-1 condition. Dimensions: 59′ 6″ x 42′ x 14′ 2″ x 5′ 10″.

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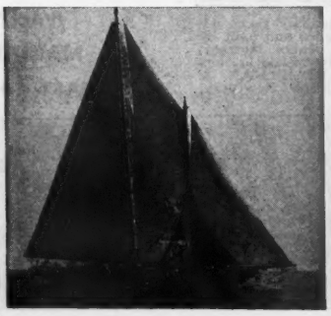

No. 1626 — FOR SALE — 70′ auxiliary schooner, designed by John G. Alden. Splendid accommodations for six and crew. Many extras. Sails in excellent condition. For further particulars communicate with YACHT SALES & SERVICE, Inc., 1528 Walnut Street, Philadelphia 2, Penna.

No. 1809 — FOR SALE — Fast 43′ auxiliary sloop, designed by Frederick C. Geiger. Excellent accommodations for four and crew. Equipment and sails in first-class condition. For further particulars, communicate with YACHT SALES & SERVICE, Inc., 1528 Walnut Street, Philadelphia 2, Penna.

WE ARE NOW BOOKING SPRING CHARTERS
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37′ Auxiliary Yawl "Keewaydin"
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Price $125.00 per week. No crew

Mr. Yachtsman:

DUE TO THE FACT that the Coast Guard does not permit taking photographs of vessels of any kind in our waters, we regret that we do not have photos to send you. However, if you are interested in a good used sailing yacht, we think you will find your choice in this listing:

1 29′ x 8′ Rhodes (Donald Abbott Visitor) an auxiliary, built in 1941 and used a part of two seasons. Sails and all parts of the yacht like new. A fine cruising or racing job.

2 30′ x 8′ 6″ Alden sloop, a splendid auxiliary, full headroom, two cabins, fine galley, toilet, large cockpit, complete in every detail. Solid and a fine cruising yacht. Condition good.

3 30′ x 9′ 8″ x 4″ Alden Malabar Jr. An auxiliary sleeping four, two cabins, toilet, galley, condition good.

4 34′ 9″ x 10′ 11″ Alden ketch. This is an unusually fine auxiliary, two cabins, full headroom, only had one owner, never had any bottom paint other than Murcop. Sails, gear, all equipment excellent all way through. This ketch is a very fast sailer and a fine boat.

5 35′ x 11′ 3″ Alden cutter. Two cabins, Gray power, full headroom, able and well equipped throughout. Here is a fast, able off-shore cruiser, a double-ender, fully equipped and ready for immediate delivery.

6 37′ 3″ x 9′ 10½″ Rhodes cutter, built in 1939, well kept, looks like new. A very well built job throughout. Sleeps four in two cabins, very fast.

7 38′ x 11′ schooner, auxiliary, complete, a beautiful job. Will satisfy the most exacting yachtsman. Two cabins, Marconi rig, well equipped. This boat is one of the finest small schooners, shallow draft.

8 38′ 11″ x 11′ Alden motor sailer, a twin Diesel job, Cummins power. A very able off-shore sport fisherman. Just overhauled and ready for immediate delivery.

9 A 36′ x 12′ x 5′ 6″ Rebuilt sloop. Marconi rig. Price very low.

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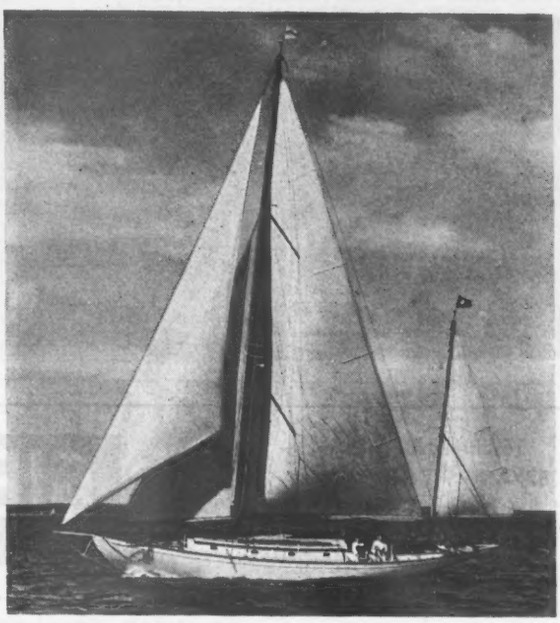
For Sale–GOLDEN EYE



Designed by Philip Rhodes. Built by Minneford, City Island, in 1937. Length overall 41 feet. Water line 30 feet. Beam 11 feet. Draft 6 feet. 5 tons of lead in the keel. 10 foot Dyer dink. Racing sails complete. 4-cylinder Lycoming engine. Sleeps four to six people. Gas stove. New running rigging. Spherical compass.

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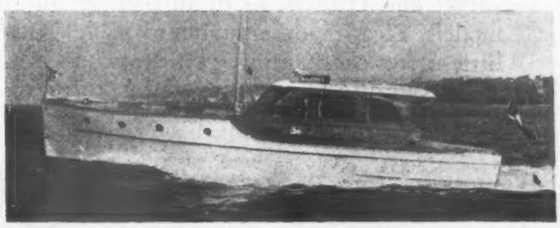
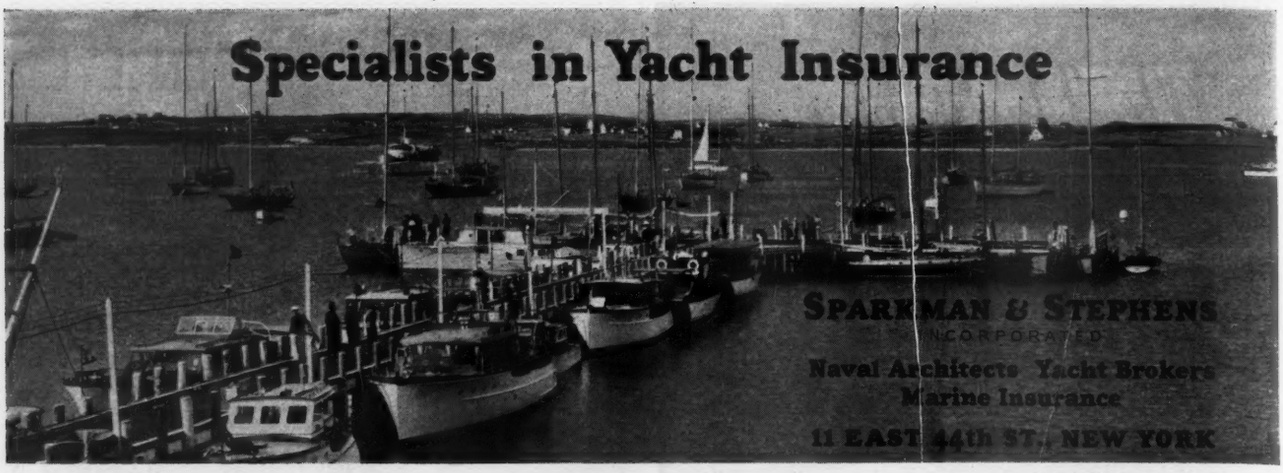


NO. 3575 — FOR SALE — 42′ custom built, high class, twin-screw, express cruiser; new 1939. Motors 150 h.p. each. Accommodations for six in owner's party. Fully furnished and in fine condition. In Florida.



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For several months there has been increasing activity in the market for good conditioned small yachts and cruisers. ,, In furthering this movement we welcome additional listings of recent models, Elcos or other standard makes. Our present offers include a number of boats requiring little or no overhauling. ,, Elco owners are cordially invited to consult us regarding maintenance with assurance of our cooperation to the fullest extent possible under present conditions.

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PROPELLERS FOR SALE

One pair (right and left-hand) Columbia reconditioned bronze 3 blade propellers, 32" diameter by 29" pitch, like new, never used since being reconditioned, discount below list price. STANLEY H. BARROWS, 2915 Vallejo Street, San Francisco, 23, California.

FOR CHARTER In commission near New York, 66' x 47' x 14' x 10' Gaff schooner. Double stateroom, single stateroom, two berths in main cabin, two pipe berths in focs'le. Fully found. Small auxiliary motor. By week, month or season with or without captain. Exceptionally low rate to experienced boatman. Reply Box 308, care of YACHTING, 205 East 42 St., New York 17, N. Y.

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8 cents a word — $1.50 minimum

Please send remittance with order

Will swap for cash one Lawley "110" No. 143. Good condition. No spinnaker. Stored in New Jersey. Reply Box 3-1.

International 14 One Design Class wanted for charter thru 1944. Reply Box 3-2.

Wanted: One standard Snipe jib or equivalent, service weight desired. Reply Box 3-3.

Wanted for Cash: Fish Class Marconi Main and Jib in good condition. Reply Box 3-4.

Wanted: Mainsail for gaff rigged sloop, foot 22' 9", leach 35' 3", luff 25' 3", head 13' 2", must be in good condition. Reply Box 3-5.

Will swap 24' auxiliary cabin yawl or cash for 30' auxiliary, divided rig, shallow draft, full headroom. Reply Box 3-6.

Wanted: Matthews Sailer or similar auxiliary. State location, condition and lowest price in first letter. Reply Box 3-7.

Wanted: N.Y.Y.C. 32 or similar sloop or cutter. Will consider yawl or ketch in good condition with stainless rigging. Prefer teak deck. Reply Box 3-8.

For Sale: Comet sailboat and equipment in good condition. Reply Box 3-9.

For Sale: Snipe No. 4345, two suits sails — one new, mahogany double planked hull, slotted mast and boom, stainless rigging, complete racing fittings, with two-wheeled trailer. Raced two seasons. Reply Box 3-10.

For Sale: Six Meter mainsails, jibs, ballooners, spinnakers. Seen at City Island. Prices right. Reply Box 3-11.

Wanted: Wee Scot sails in good condition; Wee Scot in good condition and Dyer D or X Dink. Vicinity of New York or Conn. Reply Box 3-12.

Marine artist will swap water color portrait of your boat under way for $15.00 and photo. Reply Box 3-13.

For Sale: Snipe suit of sails, used 4 times. Made by Miller, Boston, Massachusetts. Price $35. Reply Box 3-14.

Wanted: Sailboat on Chesapeake Bay or vicinity. The best to be had for $2500. Must be fast and sound. Marconi rig and power desirable but not required. Complete particulars and pedigree desired. Will return photos. Can trade tool room machinery if interested. Reply Box 3-15.

Send Replies to

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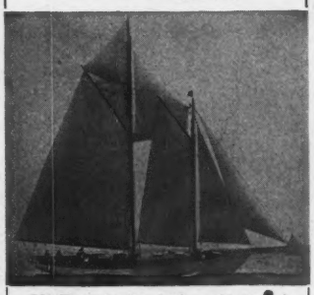
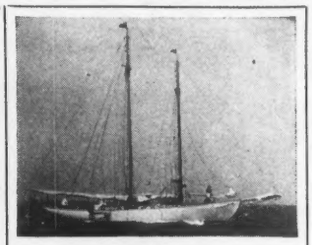


52' Post-built Alden-designed schooner

We are also offering a 47' Twin-Screw Post-built cruiser, 45' express cruiser, 25' motor sailer, 32' fisherman type hull and several other good power and sail boats. All of these boats may be inspected at our yard at Mystic, Connecticut.



FOR SALE

55' "Hand" designed seagoing schooner in good condition. New sails. Must be seen to be appreciated. Located Mianus Yacht Yard, Cos Cob, Conn. Phone White Plains 6700, or write **R. Y. CLARK, Northcourt Building, White Plains, N. Y.**

REWARD for information leading to recovery of 46' yawl "CANOPUS" last seen Rogers City, Michigan, 1930. Reply Box 307, care of YACHTING, 205 East 42 St., New York 17, N. Y.

FOR SALE

24' Auxiliary Sloop, centerboard, cabin sleeps two, 16 h.p. Gray, built 1940, fully equipped and in excellent condition. Reply Box 304, care of YACHTING, 205 E. 42 St., New York 17, N. Y.

WANTED

40'–45' auxiliary sloop or cutter of recent build and in good condition; keel or centerboard. Give full details with picture. J. G. STICKEL, Box 256, Ft. Lauderdale, Fla.

WANTED

Sloop or cutter, 35 to 40 feet, preferably "Coastwise Cruiser," full head room, auxiliary, fully found. Required Seattle, Washington. Wire or write: Box 305, care of YACHTING, 205 East 42 St., New York 17, N. Y.

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FOR SALE All necessary fittings and hardware (brand new) including s/s wire rigging for Lightning Class Sailboat. For complete list and price reply Box 303, care of YACHTING, 205 East 42 St., New York 17, N. Y.

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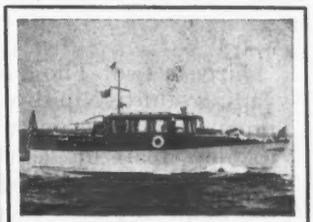
26'–32' late model cruiser, fully equipped. Must be in excellent condition. State particulars, price, photo if possible. Reply Box 302, care of YACHTING, 205 East 42 St., New York 17, N. Y.

WANTED

Cruising sloop, sleep 4, about 30 ft., shoal draft, full headroom. Do not object to centerboard. Auxiliary engine. Boat must be in good shape and available for use this summer. Reply Box 301, care of YACHTING, 205 East 42 St., New York 17, N. Y.



A.C.F. 40'. Accommodates 5. Two lavatories. Large deckhouse. Hall-Scott 100 h.p. Speed 12. Very economical. Entire boat refinished and conditioned 1943. Immaculate condition thruout. Many extras. Sacrifice quick sale. Purchased larger boat. Located lower N. J. For particulars apply **Dunham Shipyard, City Island, N. Y.**

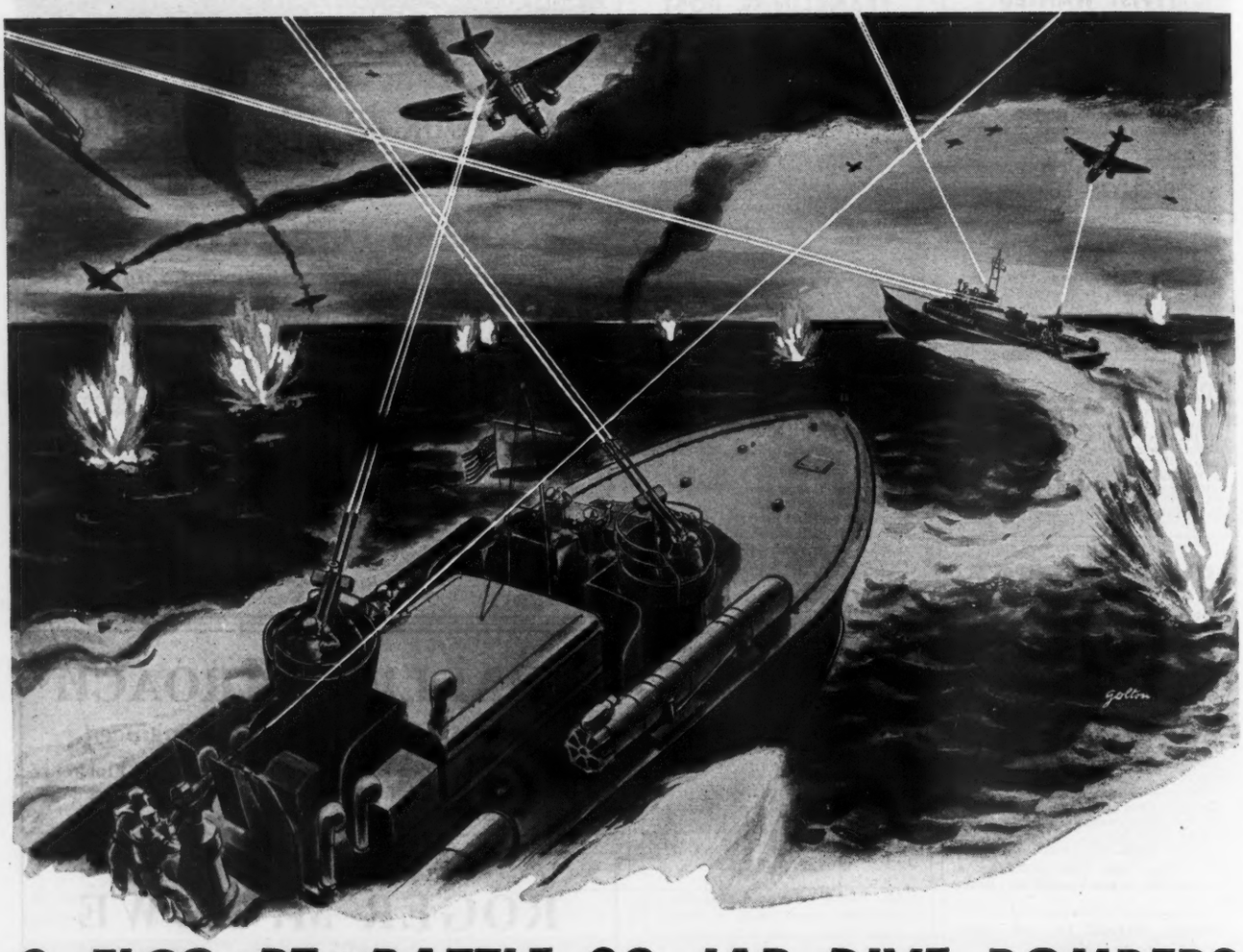
WANTED: *Cruiser, 36' to 40'*

A disabled war veteran, tuberculosis victim, must live alone, wants cruiser for a home. $500 down payment and balance $25 per month. Can you help me? Reply Box 300, care of YACHTING, 205 East 42 St., N. Y. 17, N. Y.

WANTED

Position as fabricating manager to develop construction of present orders and plan post war work on stock boats for successful business. Address reply to

JOSEPH W. HOPKINS
620 S. 42 Street
Philadelphia 4, Pennsylvania



2 ELCO PTs BATTLE 30 JAP DIVE BOMBERS --- SHOOT DOWN 4!

Thirty to two! Those odds sounded safe to the Japs. So thirty Nip dive bombers peeled off and plummeted down on two Elco PTs, determined to blow apart the lethal boats that have been hunting out and sinking so many barge-loads of the Emperor's best troops off New Guinea.

Down screamed the Japs to 300 feet. And then they realized their mistake! For they were met by a withering fire from everything the Elcos had. And Elco PTs pack a powerful punch.

Maneuvering with all their famed agility, the PTs lashed out with every gun ablaze. A Jap plane hit the water in a cloud of smoke and spray. The rest discreetly sought a safer altitude.

Again and again the planes attacked. But not once could they score a bomb hit on their speeding, twisting targets. PT guns brought four Japs down, and kept the others at too great a height for accurate bombing. After forty minutes of this futile, dangerous attack the planes retired—with fresh respect for the Navy's potent PTs.

On both sides of the world Elco PTs are striking at the enemy with a vengeance. They're blasting Axis ships both large and small. They're sinking barges packed with soldiers and supplies, covering landing operations, carrying commandos on swift raids, and doing many vital routine jobs.

The knowledge and the skill required to engineer and build these speedy combat craft were gained through fifty years of building Elco pleasure craft. Future peacetime Elcos will in turn contain featured improvements developed in the quantity production of the famed Elco PTs.

"The Boat Behind the Headlines"...

BACK THE ATTACK—BUY BONDS

Elco PT

Elco Naval Division, ELECTRIC BOAT COMPANY, Bayonne, New Jersey

Yachting

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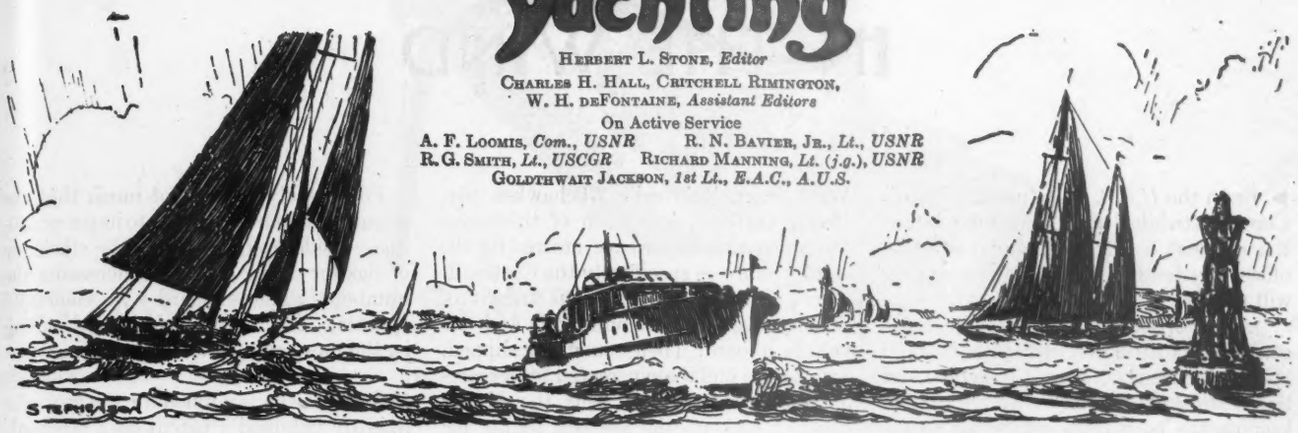

VOL. LXXV MARCH, 1944 NO. 3

TURNING 'EM BACK TO OWNERS

NOW that the production of new boats especially designed and built for the tasks required of them has caught up with the demands of the Navy and Coast Guard, many of the big fleet of pleasure craft taken over for emergency use in the first year of the war are no longer needed for active service. So the Navy Department, working through the Coast Guard, is beginning to turn back to their owners these boats that had been requisitioned to fill an acute war need. Elsewhere in this issue will be found the plan under which this transfer is to be made.

This has been carefully worked out and seems fair to the owner whose boat was taken and used by the government. A financial settlement to permit each owner to have his own boat reconditioned is vastly preferable to any Government attempt to restore these boats to the condition in which they were received. However, any such plan will work well only if it is ably and fairly administered and if the representatives of both the Government and the owner approach the matter in a spirit of fair play and with a sense of obligation each to the other. The owners of these boats gave them willingly and patriotically at a time when they were badly needed, some without any compensation at all. Many of the boats received hard usage and the owner is entitled to an award that will put her back in as good condition as possible. Yet just because this is so, no owner should expect the impossible and try to get more than the situation warrants. Some deterioration is to be expected that cannot be adequately compensated. Remember, that in offering your boat you did so at a time when the country was in danger, and in great need. You could not have done less. To many, the knowledge that their craft was of value in this crisis should be in itself a lasting satisfaction.

FOR THE SEASON AHEAD

WITH fitting out time just around the corner, many a hard-fisted yacht sailor will find that he'll probably be called upon to do more of the work preparatory to getting his pet overboard than ever before. If last year is any guide to the future, a lot of boats will be in commission this summer, and while gasoline will be severely rationed or entirely banned in some sections, auxiliaries, sailing craft and power cruisers will go overboard, nevertheless, even if they can be used only for day sailing or while lying at moorings. While many storage yards are still geared to do some or most of the work, the manpower shortage is acute, so make up your mind and place your order early, or you may sit out the summer on the beach.

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IN THE WIND

▶ From the *U.S.S.* —, Russell ("Pop") Corey, erstwhile demon Corinthian but at the moment a retreaded naval aviation officer, writes me insofar as the censors will permit:

". . . For some of you old yachtsmen I could spin a little description that would break your hearts. This sea is so blue and the weather so ideal that we have trouble keeping the boys from asking for swimming parties after we're two days out. Today I saw my first flying fish, offering a really beautiful exhibition of elementary flying. There's less sea running today than you would find off Middle Ground any decent day in July or August. What a place for a good Alden schooner! Wind force and direction almost invariable up and down a thousand miles of coastline. Wind a point for'ard of the beam on one reach and a point abaft the beam on the other. Fisherman and Genoa always set and you at the wheel feeling you can take on any other yacht and beat the hell out of her. It's Paradise, brother, sheer Paradise! . . .

". . . There's a strange kindness about seagoing regular naval officers when they deal with *retreaded naval aviators*. They kind of look on us as victims of some sort of latent insanity and feel they must treat us gently. So long as they maintain this attitude, I am safe from courts martial and may live to tell you the intimate details of my sea duty. I spent three hours today in an engine room that was hotter than one of Sandy Clark's cocktail party stories and suppose I'm now eligible for membership in the Cruising Club, and you can call Frank Connett and ask him what he intends to do about *that!* . . ."

▶ The fleet of Lightnings which was tentatively organized at Larchmont some three years ago will become active in racing during the coming summer for the first time. Called Western Long Island Sound Fleet No. 32; its officers are Richard Carr, fleet captain; Arthur Coombs, secretary; and A. R. O'Neal, treasurer . . . Owners of boats in this popular class apparently couldn't be happier. There are, I'm told, 1,028 Lightnings and a recent check up of builders, class members, and dealers indicated there were only eleven for sale . . .

▶ A grim saga of the implacable sea (or a reasonable facsimile thereof) unfolded recently upon the fog-shrouded, heaving bosom of New York Harbor, and once again the traditional tenacity, courage and *savoir faire* of the American sailor was in evidence . . . Cap'n George Youman, commanding the *Catskill*, proud ferry, was the hero of the salty epic. Putting out into the murky morn from the West Shore Railroad's Weehawken slip, Cap'n Youman, a veteran of thirty-one years maritime experience, steered for the farther shore — specifically the Cortlandt Street slip — with a precious freight of seventy-five nervous commuters and one vehicle aboard. Then something slipped. Due to the hullabaloo created by screaming sirens, whistles, and bells, the skipper couldn't pick up the fog bell tolling for him at Cortlandt Street. Backing and, occasionally, filling, the *Catskill* pursued an erratic course until Governor's Island was sighted dead ahead . . . At this point Cap'n Youman "switched over the running gears to operate the *Catskill* from the rear pilot house." About the same time the *Williamsport*, a tug, rudely bumped into her. Nothing daunted, Cap'n Youman got his bearings and berthed at Cortlandt Street only an hour and a half overdue . . .

▶ Everybody is looking forward to sailing and racing in Bermuda's tranquil waters again, come peace. I learn from N. Bayard Dill that despite concentration on the war effort, which is everybody's business down there as it is here, several boats are overboard and there is a bit of informal racing now and then on such occasions as skippers can get a little time off from their stringent duties . . .

It was in 1844, by the way, that the popular Royal Bermuda Yacht Club was founded. Lord Mark Kerr was the first commodore . . .

The first time St. David's Light blinked was November 3rd, 1874 . . .

▶ The late William K. Vanderbilt was notable in many respects both as a man and a yachtsman. Through research conducted in the waters of the Seven Seas, he contributed much to scientific knowledge of marine life. The Marine Museum on his estate in Long Island is a monument to his enterprise in this direction . . . As a yachtsman, he never spent much time in sail, but, in contrast to most millionaires of his generation who enjoyed the luxuries of palatial steam yachts but took little interest in their operation, Commodore Vanderbilt acted as his own skipper and navigator. The Commodore always "ran the show" and, from the discipline and orderliness in evidence aboard *Alva*, she might have been a battleship . . .

▶ One of the wonders of the post-war world which we're being promised so lavishly should be the next Motor Boat Show . . . Maybe there won't be a propeller in the entire production, or, if so, there'll probably be a prophetical motif of "*Not jet — but soon.*"

Fortunately there's not much that the science of invention can do to improve sailing — aside from jigging up the efficiency of rigs for racing craft and increasing the number of gadgets aboard . . . Generally speaking, the more old-fashioned sailing is, the more enjoyable . . .

▶ I can't even say much for the guy who recently obtained a patent on a mechanical device which enables a person pulling a boat to face for'ard instead of aft. This, if generally adopted, will take most of the suspense out of an otherwise exciting experience, particularly for tyros at the sweeps whose first intimation that they are off their course frequently is a volley of oaths from the skipper of a strange yacht with which they have collided . . .

▶ James G. Dale has sent me the following letter, which is a copy of one he addressed to Mr. George Culp, secretary of the Lake Yacht Racing Association, Rochester, New York.

Dear Mr. Culp:

You well may ask whether the plan to salt the Great Lakes, as reported on page 34 of the January issue of YACHTING, is not spoof.

Unfortunately, *Telltale's* synopsis of my letter omits the description of the new discovery which is the very basis of the project. Because of this omission, any intelligent reader of the article naturally would question the practicability of the scheme. In fact, Hon. J. Hemp Luffline, who introduced the bill, was so disturbed by the report in YACHTING that he called me from Washington.

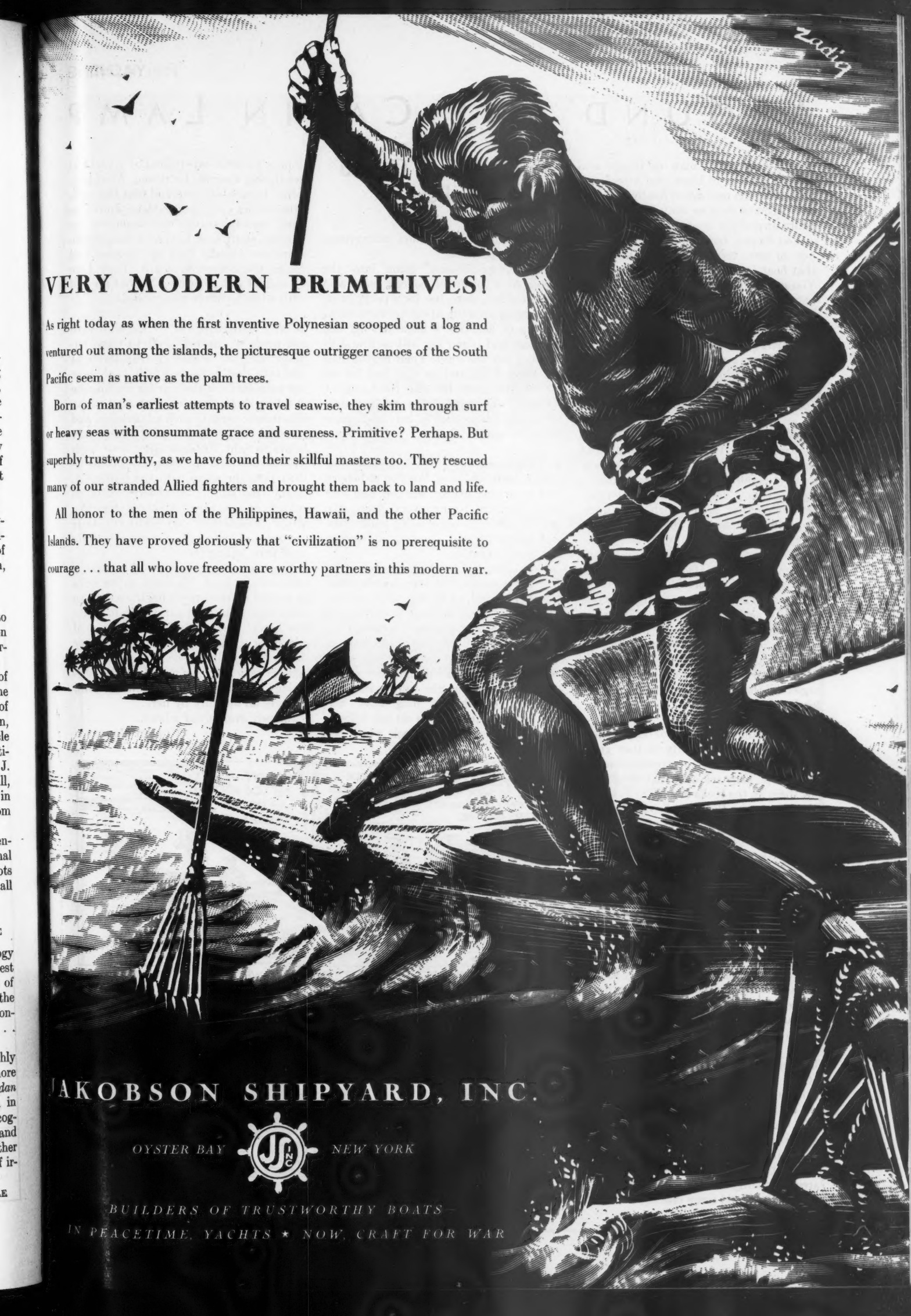
I have sent the Congressman, and enclose for you, a full copy of my original letter. This will resolve your doubts and, I trust, insure the coöperation of all members of the L.Y.R.A.

Sincerely yours,
JAMES G. DALE

No doubt I owe Mr. Dale an apology . . . Personally I haven't the slightest misgivings as to the practical nature of the project. However, I don't think the estimated cost is enough to excite the Congress to favorable action on the bill . . .

▶ The neat publication issued monthly for the members of the Sheridan Shore Yacht Club has been dubbed *Sheridan Shorts* after an exciting competition in which 426 suggestions as to a fitting cognomen were received . . . *Sea Corn* and *That Big Mouth* were some of the other titles offered derisively by a couple of irreverent competitors . . .

TELLTALE



VERY MODERN PRIMITIVES!

As right today as when the first inventive Polynesian scooped out a log and ventured out among the islands, the picturesque outrigger canoes of the South Pacific seem as native as the palm trees.

Born of man's earliest attempts to travel seawise, they skim through surf or heavy seas with consummate grace and sureness. Primitive? Perhaps. But superbly trustworthy, as we have found their skillful masters too. They rescued many of our stranded Allied fighters and brought them back to land and life.

All honor to the men of the Philippines, Hawaii, and the other Pacific Islands. They have proved gloriously that "civilization" is no prerequisite to courage . . . that all who love freedom are worthy partners in this modern war.

JAKOBSON SHIPYARD, INC.

OYSTER BAY — *NEW YORK*

BUILDERS OF TRUSTWORTHY BOATS
IN PEACETIME, YACHTS ★ NOW, CRAFT FOR WAR

AROUND THE CABIN LAMP

Nobody Ever Owned a Boat

▶ It is only after a man has bought and sailed a number of boats over a period of years that the realization finally and suddenly comes to him that he has never really owned any boat.

You have a boat built. Or you buy a new or used boat. You have the use of that boat for a year, or for twenty years. You sell the boat. Someone else has the use of her. The boat is living out her long and useful lifetime and you, and all the others who purchase her, are but incidents in her career.

The best we purchasers can claim is a brief stewardship of the boat — any boat. A splendid creation has been intrusted to our care for a little time. It is important, to *us*, what accounting we give of our stewardship. Our self respect demands that we give to the boat everything that she needs while she is in our care. If she requires paint and varnish or new sails or rigging, a new deck or a new motor, we get them for her, even though, sometimes, we really cannot afford the money.

Our stewardship is important to the boat but not so important as we like to believe. Any boat that has been afloat for twenty years has almost certainly, at some time, been owned by someone who has neglected her shamefully. Yet you may have difficulty in finding any evidence of this neglect, even on the closest inspection. Boats that are well built seem to possess an inherent immunity to neglect, if that neglect is not continued for too long a time.

▶ Boats cannot help who buys them. They develop, particularly as they grow older, a tolerance for our pretensions of ownership. They ask only that we do not put them on the rocks or set fire to them. We can care for them, or disregard them. We can change their style of rigging or renew their cabin furnishings or put in or take out a mast, and they remain complacent and patient with our puny efforts to impose our will upon them.

Moored near me, as I write, there lies a 56-foot schooner that was built in 1888 for a yachtsman who later became famous. She was a beautiful ship then. She is a beautiful ship now. During her lifetime, she has changed hands many times. Some have treated her well, others have abused her. Yet, at her age of 56 she is far sounder, by actual survey, than most yachts one-tenth her age.

The man who had her built cannot claim credit for her present excellent condition. He merely spent some money to build her as well as possible. He could not even have had much love for the boat, since he gave her the most hideous name which anyone ever fastened upon a beautiful yacht — *Babboon*.

Even this handicap did not affect her career. Patiently she waited, knowing that one day she would come into the hands of someone who would see how incongruous was this appellation.

Carina, ex-*Babboon*, came into the hands of a group of college boys who neglected her, using her for a party boat, and giving no accounting for their stewardship of her. Yet I inspected her not long ago and found her just as sound as the day she was built. Their neglect had not affected her and, as they had her up for sale, she next fell into the hands of someone who appreciated his responsibility and obligation to her, and made her shine again.

▶ We skippers like to believe that we own a boat, body and soul. We like to believe that we are her master, her god, and that she is obedient to our every desire. We pretend that it is our guiding hand alone that makes her sail like a dream ship in all kinds of weather.

Then, one day, we lash her helm and discover, somewhat to our chagrin, that she sails as well, or better, while we are asleep than when we were worrying her with our efforts at playing the master.

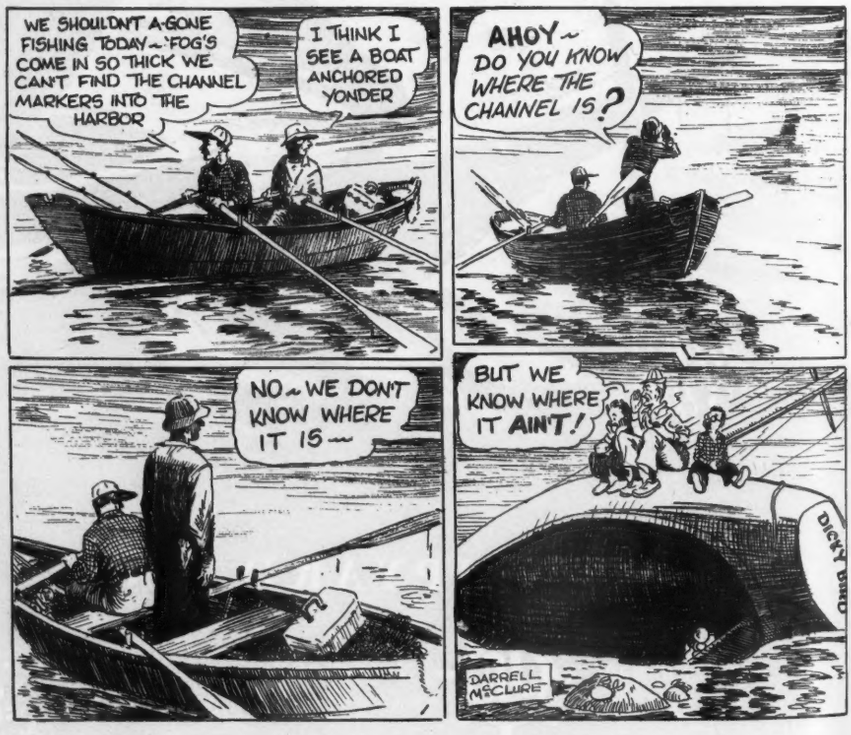
A good ship is inherently superior, at sea, to any human aboard her. Any small yacht will take you through seas which you cannot endure. She will be in there absorbing punishment long after her crew have collapsed. You do not believe this? Then pick up any book which recounts the true experiences of a yacht at sea during a terrific hurricane. What happens? Invariably, you read that the crew, after trying every puny device known to their merely human intelligence — sea anchors, storm sails, hawsers astern, helmsmanship — finally give up, beaten, and resign themselves to death. They take all sail off and go below, to await the end with what fortitude they possess.

▶ Now what happens? If the ship were not made of superior stuff to these humans, she, too, would give up the fight and take that last dive which would give her surcease from the horrible beating she is taking from the seas. But read on, in this true account of such a hurricane, and you find that the sweet creature has only begun to fight. For hour after hour, each second of which her crew expects to be their last, she stays with the battle till, finally, the storm, exhausted, begins to subside. Only then do these humans, sadly disillusioned and shorn of their pretense of mastery, emerge fearfully from their hiding place.

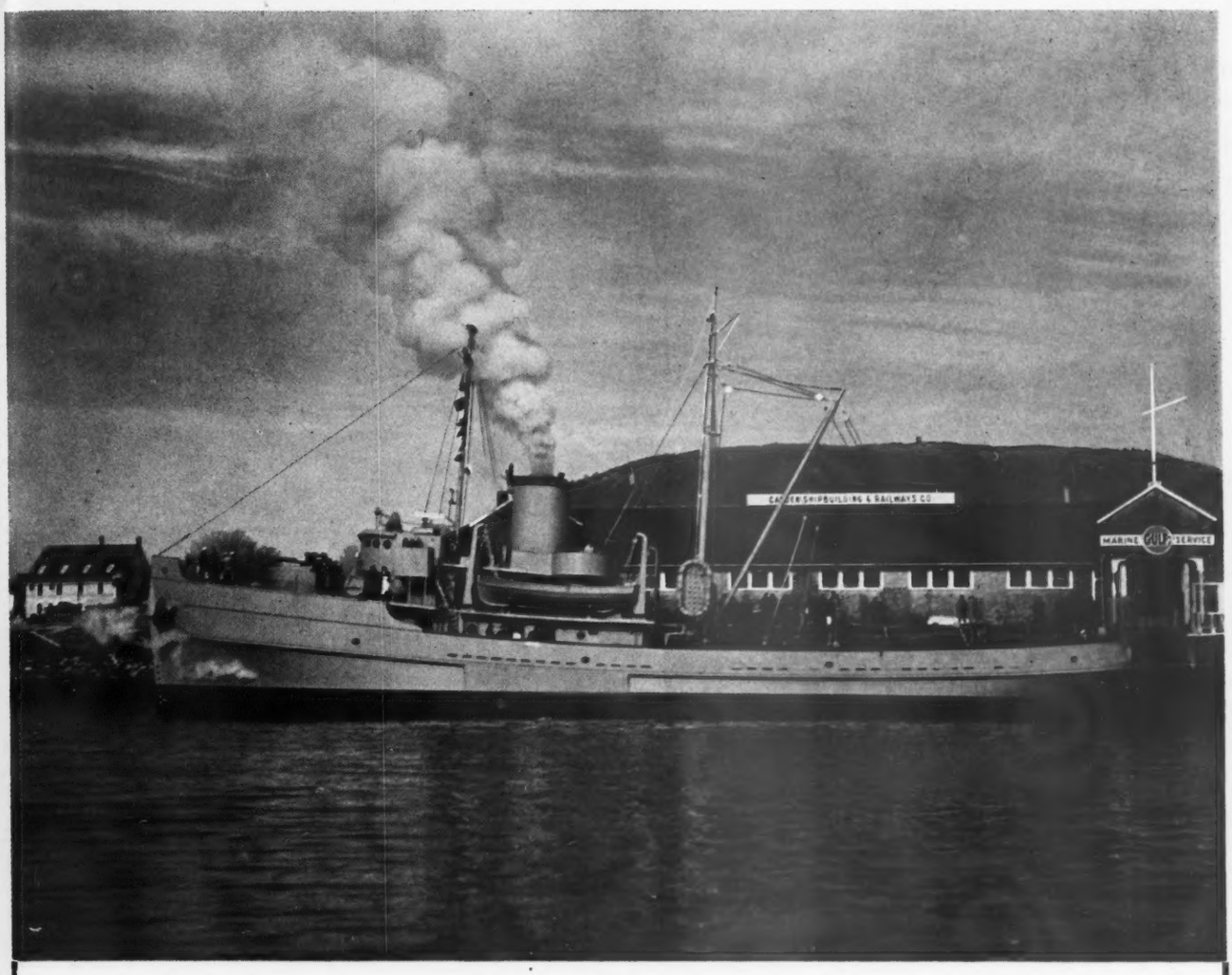
No, we can never possess so superior a creation as a boat. We learn, as we serve more and more of these mistresses, to be truly humble in our relationship to them. We accept, gratefully, our privilege of caring for a boat; we work hard that our stewardship will not be found wanting; and we part from her with fear and misgivings, praying that the new steward, too, will do his duty by her.

Nobody ever *owned* a boat.

MORLEY COOPER


WE SHOULDN'T A-GONE FISHING TODAY — FOG'S COME IN SO THICK WE CAN'T FIND THE CHANNEL MARKERS INTO THE HARBOR
I THINK I SEE A BOAT ANCHORED YONDER
AHOY — DO YOU KNOW WHERE THE CHANNEL IS?
NO — WE DON'T KNOW WHERE IT IS —
BUT WE KNOW WHERE IT AIN'T!
DICKY BIRD
DARRELL McCLURE

Cautious Conrad Takes Soundings the Hard Way



"A handful of these ships around the coasts of England saved or salvaged over 2½ million tons of shipping in the first three years of the war."

Commander Lionel Greenstreet, R.N.

CAMDEN SHIPBUILDING & MARINE RAILWAY CO.

CAMDEN, MAINE

"Member of Maine Boat Builders and Repairers Association"

IN THE CARIBBEAN

A native sloop running before the Trades in the lee of one of the Windward Islands. Much of the communication between the smaller islands is carried on in small sailing craft

Three Lions Photo

YACHTING

Volume LXXV MARCH + 1944 Number 3

Tore Asplund Photo

A few years ago, this schooner was big and famous in blue water races. Today, she is small, dwarfed in the gray emptiness of the cold North Atlantic, yet she hunts the sub as assiduously as do her larger anti-submarine sisters

SHEETS AND HALLIARDS GONE TO WAR

How the Coast Guard's Sailing Patrol Craft Have Fared in a Year and a Half at Sea

By RUFUS G. SMITH, *Lieut., USCGR*

OUT ON the rolling Atlantic tonight, there is many a fighting ship and many a fighting man engaged in the battle against Nazi submarines. Old ships and new ships, little ships and big ships, fast ships and slow ships; and, strange as it may seem, some of them are sailing ships, and little ones at that.

It's January — the sea is rough, the water is cold as it lops over the weather rail and back into the cockpit of a certain little yawl. A few years back, she was big and famous in the over-night and summer week-end races on Long Island Sound, with queenly spars hoisting billowing spinnakers skyward. Tonight, she is small; dwarfed by the black emptiness of a cold North Atlantic night, a tiny speck as compared to the portion of civilization a few miles away which she is there to help safeguard, two hundred thousand tons of precious lives and vital war materials plodding eastward in convoy.

Two men stand watch in a little shelter in the yawl's cockpit. One looks to windward out and over the cold black water tumbling toward him. The other keeps watch to leeward out over the same dark water, the same seas, as they roll on into the night, unbroken by the slim hull of the little ship. There is nothing else to see — nothing else tonight. Down below the third member of the watch works at a listening device, listens and hears the seas roll on — nothing else to hear tonight.

This morning it was bright and warm and calm. The watch thought of the July days way back in the summer of '42 when this business of searching for subs in sailing craft started. When the summer sea was smooth for weeks on end, like peace-time days along the coast, with the schooners sliding from port to port and the ocean racing cutters and yawls vying with each other in the art of trimming genoas and jibing spinnakers in Force Two, Beaufort. It was a fine morning to be at sea. But during this winter afternoon it had commenced to blow from the east and dark clouds moved in with a bit of rain. It blew up rapidly and the watch took in the storm trysail, for it is January and when it starts to blow it usually keeps on blowing for a day, or a week, or maybe all the way into the spring, and storm trysails are more sail than a modern yawl wants to carry under those conditions, between September and May.

That watch, and other watches have great stories to tell of Coast Guard Coastal Picket duty for the Navy's Eastern Sea Frontier. Among them is the tale of how a famous Bermuda racer all but rammed a sub one blustering night; of how the crew of another well-known schooner held their breath, then grabbed their guns as a conning tower surfaced alongside and quickly submerged again to slink away. Stories of the big blow of December '42 — ice freezing on teak decks and once shining brass. Stories of ships that did it under sail alone while engine parts lay frozen by procurement red tape on the shelves of Midwestern manufacturers. Of churning convoys bearing down through spring fogs; and battles with fall gales and lee shores, won by the little ships but lost by great freighters. Stories of boys who left the tillers of

little centerboard sloops to handle a wheel for the first time, and stayed to command a ship. Of the men who came for a lark and stayed because it was tough. Stories of bungling and breakdowns, and troubles no end, which would tear to bits the wood and canvas of lesser ships and the hearts and spirits of lesser men. There's a story in every phase of the operations — but most of it will have to wait.

One part that can be told, however, is how yachts designed and built for intermittent use in fine weather (all summer weather is fine weather) have stood up to year-round patrol duty on the open sea. No better proving ground for design and construction could possibly be imagined.

The particular group of ships considered here has patroled out of an "Eastern Port" along the Middle Atlantic Coast. January, 1944, is the eighteenth month on the job for some of them and all have been at it for at least a year. There are many vessels in this group and their job has been to go out to "station," anywhere from a few hours to a day's run offshore, and stay there from a week to three weeks, hove to, looking and listening, and looking and listening some more. A radio telephone is the principal "weapon" of these far-flung sentries of the great and busy port of New York.

To date, the top-ranking ship has been "on station" 5748 hours, or about 240 days, and that's not counting the average of about 16 hours per run between the base and the patrol station. It does, however, include staying out there on the job in everything but hurricanes and the very worst of ice-making northwesters.

With one or two exceptions, every vessel in the group has been a good one for the job. None has been perfect and every one would be quite different if designed specifically for the job she has been asked to do. Some of the vessels were offered, then borrowed; some were selected, then borrowed; some were given; and some were purchased. But on the whole the vessels brought together in the Third Naval District's Coastal Picket sailing fleet were the best of their type and size available in those waters (only one came from outside the district).

Smallest in the fleet are the modern ocean racing types, ranging from 46′ to 68′ over all; then come the "small schooners," 50′ to 81′ over all; then the motor sailers, 58′ to 81′ over all; and, lastly, the "big ships," of which the largest is a 147′ *brigantine*, now operating with fore and aft sails only.

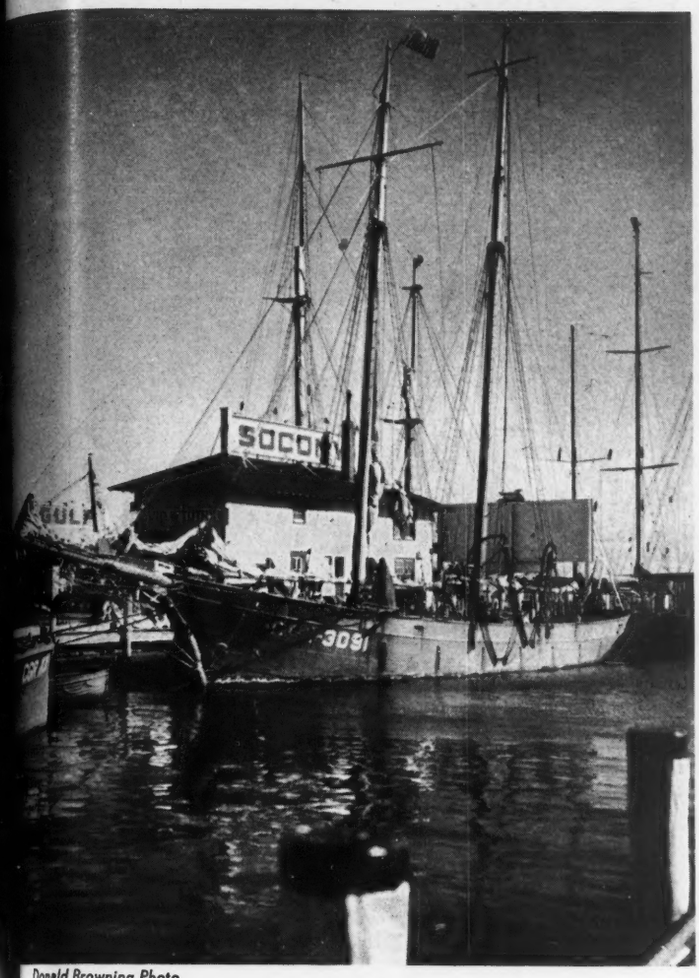
Donald Browning

Yachts designed and built for intermittent use in fine weather have stood up to year-around patrol on the open sea

One of the vessels of the Patrol "on station" many miles at sea; under these conditions, canvas is kept to a minimum

H. Lee Platt

Eighteen months ago, when the fleet was being gathered together, there was the usual discussion of what type rig, hull form, etc., would work out best in the projected service. Interested yachtsmen found reasons for justifying their own favorite rigs, hulls, layouts, and what have you. Regular Coast Guard and Navy officers looked over some of the boats and thought they all looked too small, and the spars and rigs too lofty, especially on the ocean racing yawls; some in fact condemned the whole idea because the spars were taller than their vessels were long. It was spring and early summer then and there was never any thought of using the vessels as anything but a temporary stop-gap. Nobody then had any idea of using these ships in winter weather. But altogether the discussions were pretty academic, at least they seem so now, after a year and a half of practical experience. So do a great many of the others I have read, heard, and participated in back over the years. For despite all that has gone before regarding the fine points of design, one type of boat versus another, etc., the biggest single message the men of the picket fleet have for past, present, and future owners of the type of vessel in question is: Keep after your builder, it's how



Donald Browning Photo

One of the vessels in the Patrol's "big ship" class is a 97' o.a. schooner originally built as a Dutch pilot boat

good a job he does that really contributes to comfort and the ability of the boat and its crew to do a job.

From keel to truck, we have found out a lot of things about this little fleet of yachts working as men-of-war that never could have been compiled in any other way on so common a testing ground and under so wide a variety of wind and weather conditions. In the fleet are: deep draft and shoal draft, deep forefoot and cutaway, feathering props and solid, teak decks and soft pine, gaff rigs and tall jib-headed, gas engines and Diesel, wooden ships and metal, even such unusual items as athwartship bunks and belt driven transmissions. Ask the boys who have been out taking the weather as it comes and you'll find that they have a score of opinions on one type versus another but that what really counts is tight decks and skylights; ventilation that stays on the job even when everything is battened down on deck; engines and generators which run fair weather or foul; and most of all, wiring which does not short out. How good a job was done in the building has been the most important factor all along.

Before getting into the details of how various items of gear and equipment and parts of the ships have held up under the long ordeal, it should be explained that there were practically no alterations of any kind made in the vessels when they came into this service. From time to time since, there have been a few minor changes in layout, winter houses added on deck, etc.; but practically all of this has been in the form of additions rather than conversions. Nothing at all like the extensive conversion work done by the Navy on the large yachts taken into that service has been necessary. Crews numbered about the same as formerly and any additions to make them into "fighting ships" did not require any real changes. Three or four of the gaff-headed schooners in the fleet struck their topmasts in donning battleship gray, and one yawl gave up the top third of her lofty jib-headed mainmast, shortened her main boom, and moved her mizzen inboard to become a ketch. Otherwise, there has been none of the much-discussed shortening of rigs. Leaving them as they were has been all to the good; this will be discussed later.

Ballast keels being at the very bottom are a good point at which to commence the discussion of what's good and what's bad in the vessels of the off-shore picket fleet. In addition to corroborating the theory that lead only dents while cast iron may break off on striking a rock, our principal findings as to keels have to do with the modern ocean racers with their heavy chunks of lead way down low. In spite of dire forebodings from some quarters, no vessel has yet swung her keel off into Davey Jones's locker, though every one of the eight deep-keeled babies and some of the others, too, have had to have a lifting job done on their keel bolts. The need for this showed up gradually in the form of increased leaking which necessitated hauling but, except for a few of the bolts which were the devil and all to get at, tightening up the keels was not much of a job, and it stopped the leaks. In one case, a year of bouncing around the North Atlantic caused the heavy lead keel and the floor timbers to which it was attached to begin to weaken the lower ends of the frames. This might have been a serious matter, but it was caught promptly and repaired comparatively easily.

One feature of the keels of the modern yawls and

(Continued on page 88)

H. Lee Platt

Smallest in the fleet are the modern ocean racing types, ranging from 46' to 68' o.a., then come the "small schooners," 50' to 81' o.a., then the motor sailers, 58' to 81' o.a., and, lastly, the "big ships," of which the largest is a 147' o.a. brigantine now operating with fore and aft sails only

Official U. S. Engineers Photo

A medium tank being ferried across a stream by the U. S. Engineers on standard pontons powered by 22 hp. Evinrude motors

THE OUTBOARD HAS GONE TO WAR

The Outboard Motor Is Serving on Every Fighting Front, and With Every Branch of the Service

By CRITCHELL RIMINGTON

BEFORE the war, there were two schools of thought about the outboard motor. Both were candid and outspoken. The first group regarded such portable power plants as nothing more nor less than instruments of the devil, and the very sight or sound of a "put-put" was the invariable occasion for an impressive display of nautical but ungentlemanly invective. Fortunately for all concerned, that group was in the minority, and — like T-bone steaks — is to-day rapidly passing into limbo. The second, comprising the outboard's equally outspoken adherents, is legion, and it includes yachtsmen and commercial boatmen from every waterway in the nation who have found the outboard motor to be a dependable and efficient type of propulsion equipment.

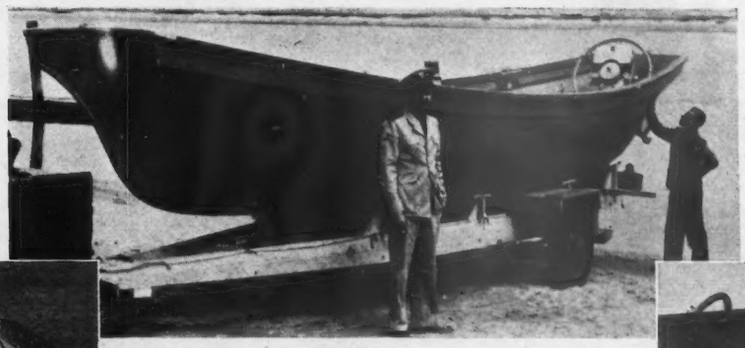
During the pre-war years the number of outboard users grew by leaps and bounds, and by the summer before Pearl Harbor the number of motors in service reached an all-time high. It would not be unnatural to assume that the war had put the outboard on the shelf for the duration, yet the facts are that there are more "egg beaters" in operation today than ever before in history. The explanation is that the outboards have gone to war, and investigation reveals that they are serving in almost every naval and military unit, and at every theater of operations. Present-day warfare has introduced countless new problems and techniques in both combat and supply, and a surprising majority of these involve the use of waterborne equipment. Hence the need for light, powerful, and portable propulsion machinery became both immediate and vital — and it was the outboard which supplied the answer. Not only have the steadily increasing amphibious operations brought these motors to the fore, but equally important is the part they have played — and are playing — in roles as varied as being converted to auxiliary pumping units and being used to propel Hudson Bay canoes in the invasion of Attu.

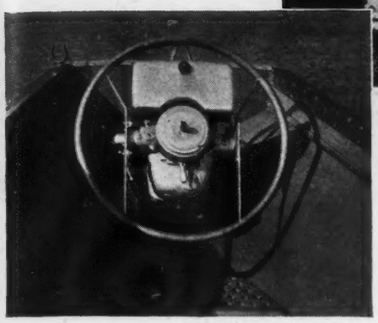
All in all, it adds up to the fact that the once lowly outboard now gets top military and naval billing!

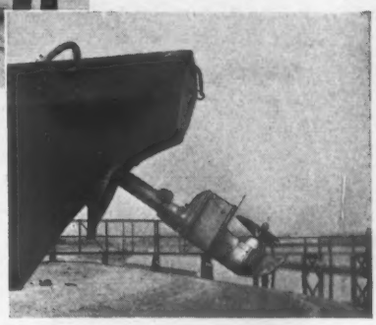
* * *

It was the Army — or to be specific, the Corps of Engineers — which initiated the adaptation of the outboard to military requirements. One of the major functions of that Corps is the bridging of streams and the cross-stream ferrying of both troops and supplies, and in maneuvers covering those operations the outboard quickly demonstrated what could be expected of it. "It was found," states Major Carl H. Clement, "that many improvements for military use could be made with the motors, in both operation and in maintenance. Military demands necessitated the fulfillment of these basic requirements: ruggedness, easy starting, full reversing, ability to consume standard fuel and lubricants, mountable on various types of boats and pontons, efficient power transmission and simple controls." Quite a large order for any motor!

Today the Engineers are principally concerned with







Top, the Navy's outboard propelled surf landing boats, which are made of plastics, make 14 knots with a light load, and weigh only half as much as an orthodox life boat. Left, the motor in tilted position, showing the large steering wheel. Right, the stern is specially designed to accommodate the motor. Official U. S. Navy Photos

two basic types. One is a Johnson POLR 22 hp. utility motor which is used in conjunction with slow-moving craft, and is adaptable to almost every type of boat used in bridging and ferrying operations. This model also is used on all pneumatic pontons, ranging from the 6 to the 25 ton types (the latter being 33′ o.a.). The other is the Evinrude 50 hp. 8008 which is the standard propulsion plant for the Engineer's famous "storm boat." This is a high speed motor which is capable of between 20 and 35 m.p.h.

The Army's "storm boat" is playing so spectacular a role in every theater of military operations that a word about this unique craft is of interest. Quoting from official sources, this boat "is an assault craft which is used in forced crossings of wide streams when secrecy is sacrificed for speed. Built of plywood, it has a double bottom, and has the following characteristics: length, 16′ 9″; breadth, 6′ 6″; weight of boat, 450 pounds; weight of motor, 200 pounds; speed (with two men), 30 to 35 m.p.h.; speed (with nine men), 20 to 23 m.p.h.

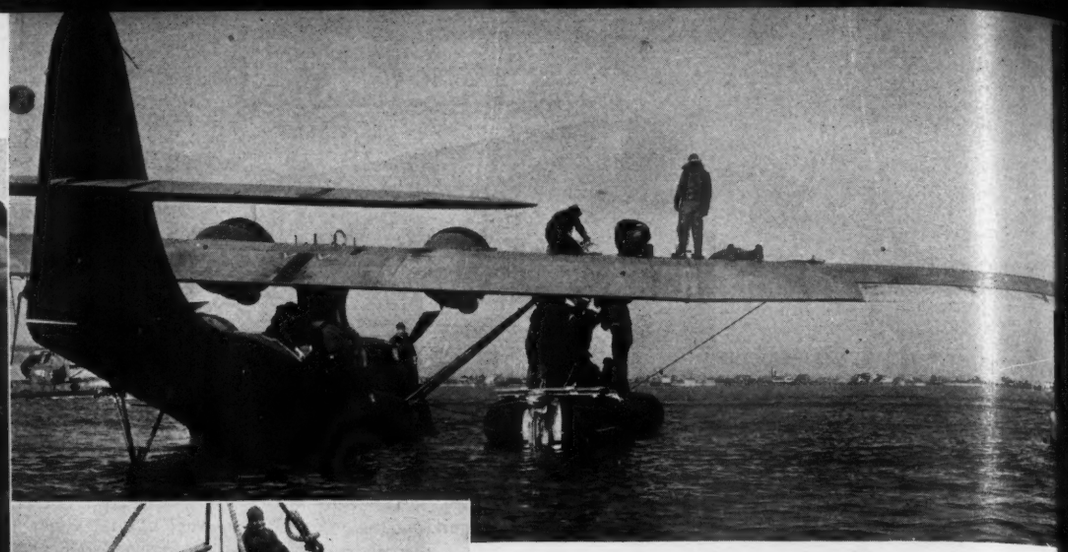
"The storm boat should be operated by two well-trained engineer operators. The boat is designed to carry, in addition to its two-man crew, seven fully equipped riflemen. Any additional load greatly reduces the speed of the boat. The men should crouch low in the boat, rifle in hand, ready to leap from boat to shore. The boat may be slowed down at the far shore (without stopping) in order to discharge its passengers, or it may be beached while going at full speed, the riflemen leaping out as the boat comes to a halt.

"The storm boat may be used to ferry ammunition, gasoline and other vital supplies at full speed. Its most efficient cargo capacity, in addition to its two-man crew, is 1,500 pounds; speed is lost if this is exceeded. Cargo should not be piled higher than the gunwales; center of gravity of the cargo should be as low as possible. Storm boats (without motors) are nested in groups of four for transportation. They are carried on two-wheel trailers, while the motors are carried in the trucks."

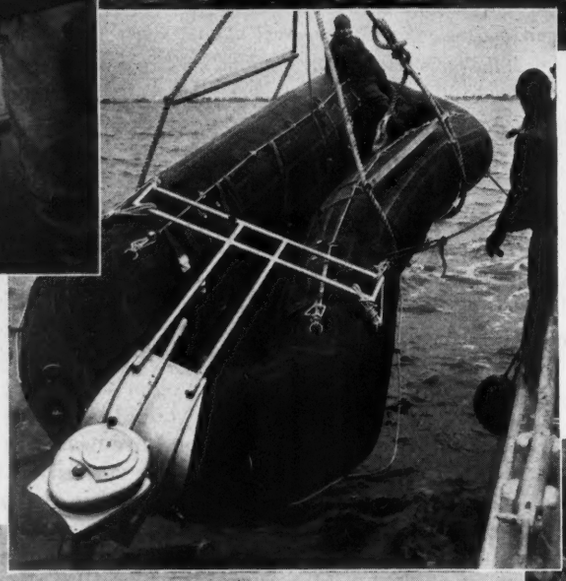
In the case of both the Army and the Navy, the employment of the outboard motor has greatly simplified the problem of small boat hull construction and design. There have been relatively few installation difficulties (as the accompanying photographs illustrate) and simple stern brackets have been devised for almost every type of hull. The storm boat, for example, is fitted with a Bi-Pod mounting bracket, while rubber boats have an ingenious variety of fittings, and every type has successfully weathered the most exacting operational usage.

Reduction gears are available to meet almost every requirement, while long lower housings — as well as housings of adjustable depths — have been designed to meet varying loads. One of the most interesting innovations, which was instituted by the Engineers, is a development which provides complete maneuverability and positive steering control throughout 360 degrees, thereby enabling the operator to hold the boat, raft, or ponton motionless or to move sideways in either direction. Every size of outboard, from 1.1 hp. upward, has been found useful but present day demands indicate that a motor under 5 hp. is, as a general rule, too small to be practical for general service requirements. The largest model used by the Army and

Top, outboards played a major role in ferrying operations in the construction of the Alaskan Highway. Right, large rubber rafts, driven by a single 22 hp. motor, ferry men and ordnance of an armored division. U. S. Engineers Photos



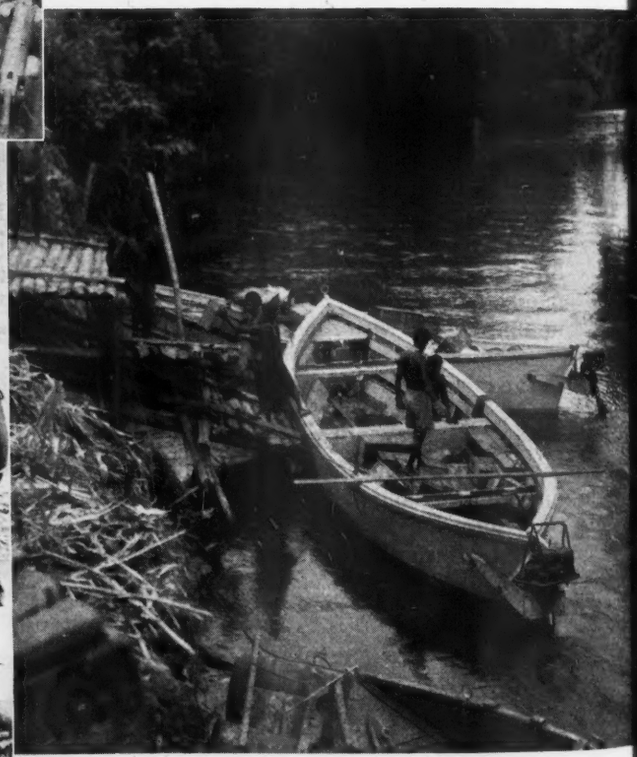
Above, one of the Navy's outboard adaptations having a special drive. Below, outboard propelled rubber barges have proven ideal rearmament boats. This one is ferrying an aerial torpedo



OUTBOARDS IN ACTION

Above, outboards are vital in the maintenance of the Navy's air arm. Here a pneumatic boat assists in the servicing of a flying boat. Left, note the Navy's unique method of attaching an outboard to this ship-based rearming barge. Below, natives unloading supplies from outboard propelled surf boats somewhere in New Guinea. U. S. Navy and Signal Corps Photos

Below, outboard propelled Storm Boats bring back casualties from the front line fighting at Guadalcanal to an upriver base. Signal Corps Photo



Below, an amphibious force in miniature. One pneumatic barge, one Storm Boat, one outboard and twenty-nine passengers! Signal Corps Photo

Signal Corps Photos

Somewhere in New Guinea, the Japs pulled out in a hurry, but they left an outboard behind. A "bale-wire engineering unit" put it in operation, but their opinion of this Tojo model was not flattering!

Navy is the giant Murray & Tregurtha 125 hp. No. 02 type, a monster unit powered by a Chrysler Royal marine engine, and there is little doubt but that these super-motors possess great possibilities for even further development.

It is perhaps obvious to state that an outboard motor, to achieve maximum operational efficiency, must be handled by well-trained personnel. The Engineers have assured the proper training of operators by the establishment of a service school at the Evinrude plant in Milwaukee. This school is limited to enlisted personnel and, while the course is of but four weeks' duration, it is an intensive one and has proven highly successful. To keep motors running under the toughest service conditions and to patch up battle-scarred machines requires hundreds of resourceful, highly-trained experts in outboard handling, maintenance, and repair, and "Evinrude University" today has an alumni of which it may well be proud. After this classroom training is completed, the operator's studies are continued in the field under simulated battle conditions and, by the time an "outboard engineer" has been given his final O.K., he can be considered an expert in everything from bale-wire engineering to motor overhauling in a blackout.

One of the most important innovations initiated by the Engineers is the so-called "operating kit." The bugaboo of all mechanical gear, when operating in the battle zone, is operational failure due to lack of parts. To minimize this possibility, the Army developed a kit which is the "Siamese twin" of every motor, whether it is afloat or ashore. In each kit is packed essential accessories and parts such as a spare prop, shear pins, spark plugs, oil measuring cup, and extra copies of the operator's instructional manual. And, as an extra precaution, every motor, when delivered to the Armed Forces, comes in a sturdy plywood box which contains not only the motor and the operating kit, but additional extra props, a 5-gallon gas can and numerous other outboard essentials.

As a general rule, all equipment of the Engineer Corps (including boats, rafts and pontons) is transported across land, yet short water jumps are often necessary. This means that a certain amount of their operations are on salt water, yet neither the Army nor the Navy has experienced any particular mechanical difficulties in water having a salt content. This indicates that the often expressed belief that outboards and salt water do not mix is but another "old wives' tale" — a point of which all post-war yachtsmen should make careful note.

Both the Army's Transportation Corps and other service forces have given these motors an astonishing range of assignments. In New Guinea, they powered a water-borne supply line which coursed along a score of jungle streams and supplied the garrisons at both Lae and Buna; on the streams and lakes of western Canada, they did yeoman service in the construction of the Alaskan highway; in Australia, they are serving on surf boats as well as a wide variety of harbor craft; and there are few Alaskan harbors which do not echo to their "round-the-clock" missions.

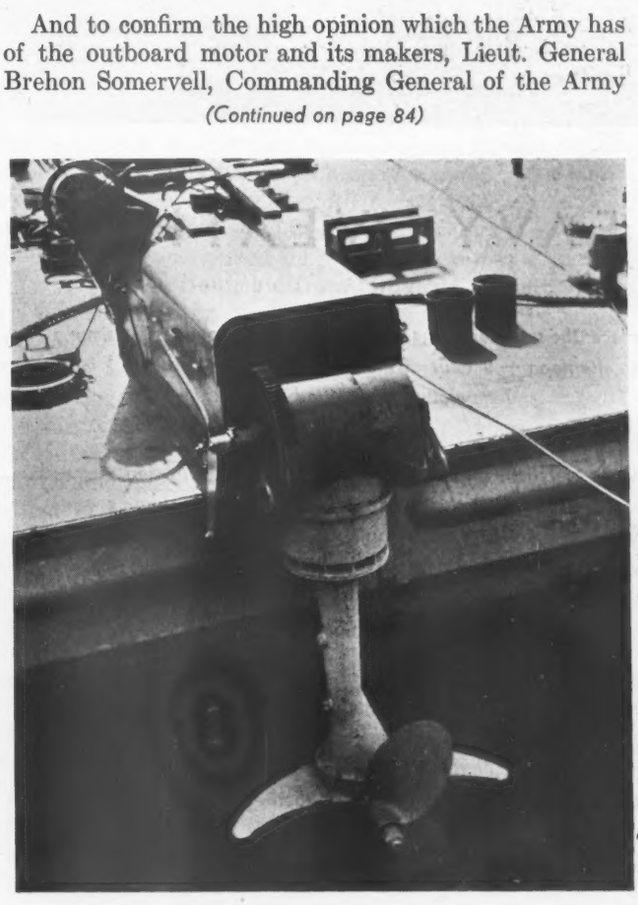
Speaking of assignments, a graphic illustration of their "load" capacity, which offers convincing data on how and why they are serving the Army so successfully, is given in the following load-speed table of the 22 hp. motor, prepared by the Engineers Corps:

Assault-boat pontons (two assault boats M2 joined stern-to-stern):

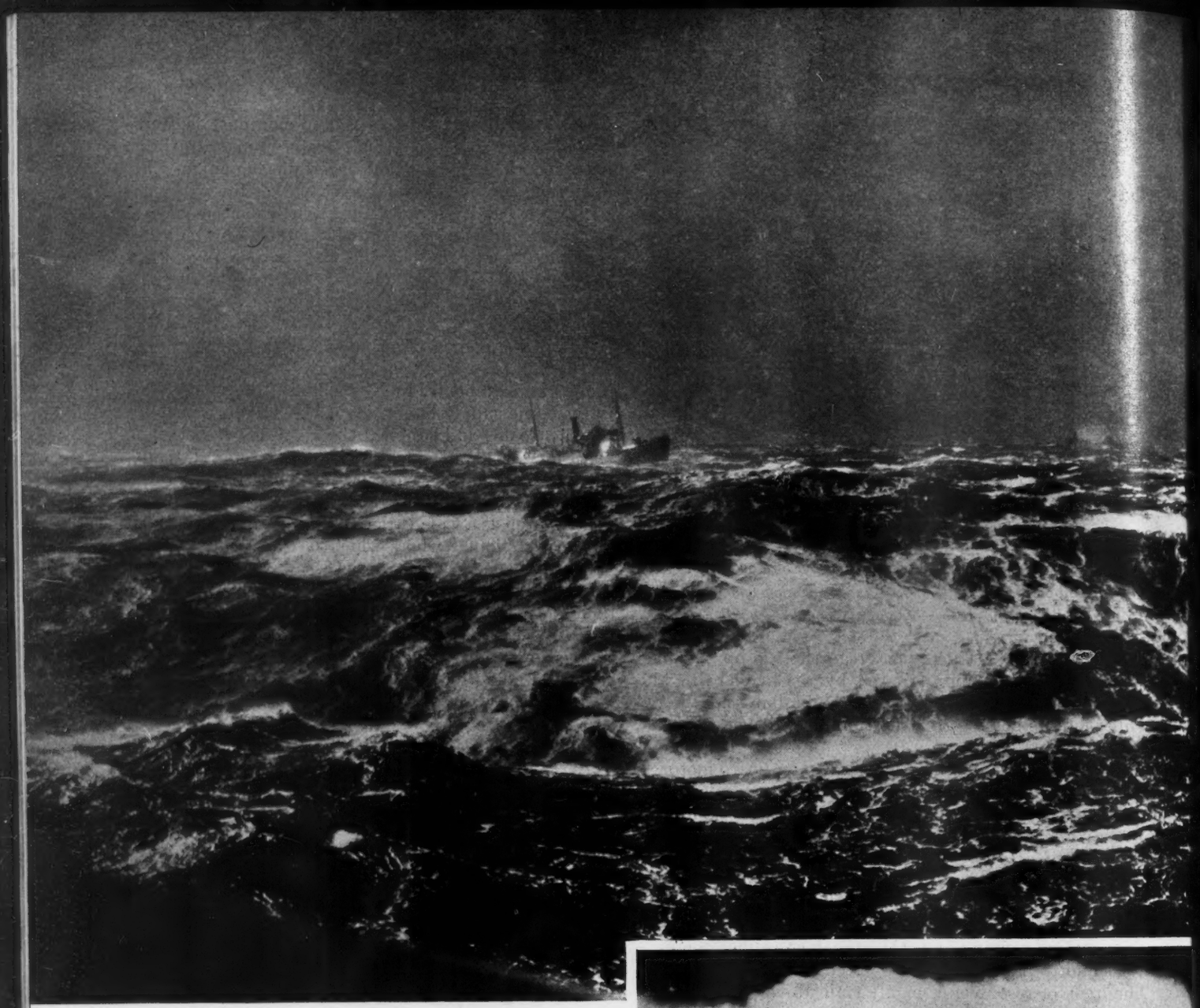
Load (pounds)	*Speed (miles per hour)*
300	15.4
1,500	13.6
2,700	7.4
3,900	6.7
6,000	6.5

And to confirm the high opinion which the Army has of the outboard motor and its makers, Lieut. General Brehon Somervell, Commanding General of the Army

(Continued on page 84)



A giant 125 hp. Murray & Tregurtha outboard, which is capable of propelling large barges and other heavy equipment. It is powered by a Chrysler Royal marine engine



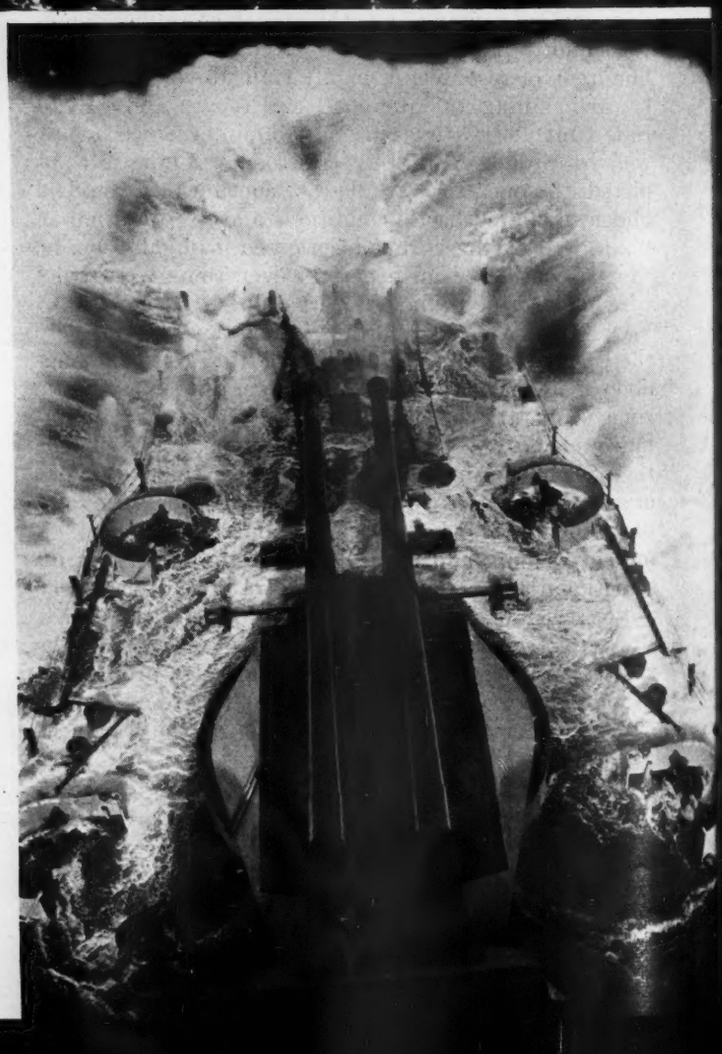
HEAVY WEATHER

The place: the starboard wing of a North Atlantic convoy. The time: a winter afternoon — 2 bells of the 1st dog watch. Visibility: 1 mile. Temperature: 11°. Wind: Force 9

Above, a merchant ship of an eastbound convoy rolls and pitches under the onslaught of gale winds and high seas. Right, surging water foams over the bow of this escorting cruiser as she smashes ahead. Heavy seas rack the ship, and make life a freezing, blinding maelstrom for officers and men aboard. Convoy duty is a memorable experience

Words cannot describe the violence of a winter gale in the North Atlantic. Although no authentic figures exist regarding the height of waves, the highest in that area are considered to be about forty feet. Storm waves in the North Atlantic are believed to travel about 22 miles an hour, and are estimated to be between 150 and 300 feet in length. Once experienced, an Atlantic gale is long remembered

Official U. S. Navy Photos



We were yachtsmen, those gentlemen who spend their leisure moments on sparkling blue waters. But it was cold, wet, and the wind was howling fiendishly!

RACING THE SUN

There Was Never a Dull Moment When Six Men and a Fifty-four Foot Ketch Sailed the Honolulu Race

By W. C. KEIL

IN THE summer of 1939 I sat in a careening cabin, hanging on by the seat of my pants, one foot against a buffet, the other braced tightly against a wildly swaying mast, and pondered that oft-repeated statement, "What fools these mortals be!" There we were, six men, in the 54-foot ketch *Stella Maris II*, pounding — and I do mean pounding — our way from San Pedro to San Francisco in the teeth of a real Pacific Coast nor'wester. A 2200-mile sailing race from San Francisco to Honolulu was in the offing. The *Stella Maris II*, designed and built by her owner, Dr. A. A. Steele, was launched with a scant week separating her maiden voyage and the July 4th starting date. We had shoved off from San Pedro, an eager crew, with groceries to the right, groceries to the left, tools and parts adorning the cabin decks and bunks and vegetables piled high in the out of the way deck spaces. We were, according to the general consensus, yachtsmen, those gentlemen of leisure who spend their holidays, week-ends, and vacations on sparkling blue waters. In short, we were yachting to the Nth degree and I was trying to figure why we were doing what we were doing and why we were calling it pleasure — not complaining or regretting my actions, because I'll do it every time, but just looking at myself and some others and thinking that Puck could have been referring to yachtsmen when he uttered those startling words.

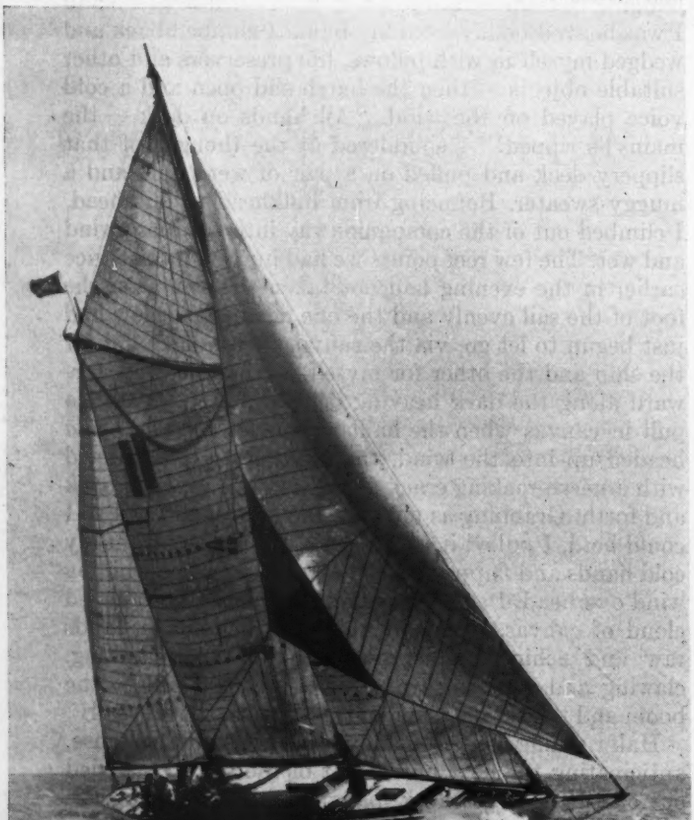
Under double reefed mainsail, the *Stella* fairly flew as she plowed through foaming wave crests and dropped into deep troughs. This must sound romantic and adventuresome. But, after crashing through a number of what appeared to be cliff-sized seas, tiny streams of water found their way into the cabins below and left few dry spots. I went forward after my first cold watch and climbed into a soggy bunk. About to doze off amid the din of heavy seas pounding the hull, and locker doors banging, a clammy drop of water splashed my face and I was heaved bodily from my bunk. I climbed back and wedged myself in with pillows, life preservers and other suitable objects — then the hatch slid open and a cold voice played on the wind. "All hands on deck — the mains'l's ripped!" I shuddered at the thought of that slippery deck and pulled on a pair of wet pants and a muggy sweater. Bouncing from bulkhead to bulkhead, I climbed out of the companionway into numbing wind and wet. The few reef points we had hurried into service earlier in the evening had not taken the strain on the foot of the sail evenly and the one nearest the clew had just begun to let go, via the canvas. With one hand for the ship and the other for myself, I made my way forward along the dark heaving deck and stood ready to pull in canvas when the halliard was let go. The *Stella* headed up into the wind, the sail slatted and banged with a nerve-racking crack as the wind whipped it back and forth. Grabbing as much of the heavy, stiff sail as I could hold, I pulled it to the deck. It snapped from my cold hands and flapped machine-gun like in the whining wind overhead. I again managed to muzzle the frenzied cloud of canvas, which by this time had made hands raw and aching. After several minutes of yanking, clawing and swearing we secured the torn sail to the boom and the skipper sang out, "Up with the staysail!"

Half running, half crouching, with every muscle tense, anticipating the next movement of the ship, I scurried out on the open foredeck, banging chilled shins on the

mooring bitt when my foot slipped on the wet surface of the varnished deck. I felt myself going out and over and, catching an extra breath and, luckily, the forestay, I succeeded in falling in the skimpy rope net hanging under the bowsprit. Climbing back, I clawed at the wet canvas gaskets holding the furled staysail on the boom. Figures crouched over the fore deck freeing gaskets; then the sail was hauled aloft, cracking and snorting like something possessed. Someone tugged at my arm and shouted through the wind that the furled jib on the bowsprit had a bulging fold filled with water. We crawled out on the pitching bowsprit and attempted to pour the water out of the sail by lifting the bulging portion. It was too heavy. We decided to free the sail and let it drain in the right places. The gaskets were secured with square knots instead of reef knots; which were wet, hard and refused to budge. My stiff fingers tingled with pain. While thus occupied, the bowsprit, on which I was riding, swung high in the air as each sea passed under the keel, and swept low over the water with a rush when the bow fell into the following troughs. On one of these downward swoops, I noticed out of the corner of one eye that our end of the *Stella* was descending with great zest and I could feel the sea coming up to grasp me. Suddenly, in a flurry of foam and with a quick gurgling swish, I felt myself thrust into the heaving sea and tightened my grip on the bowsprit, hoping that I could hang on till she came up again. After what seemed like minutes of racing along under the brine, with quick visions of swimming alone in that black, cold sea, the bow began to rise and lifted me, drenched to the skin and more, up into the chill of the icy wind. I spouted like an old whale, trying to blow out the salty taste and shake clinging drops from my dripping face.

We freed the jib of its weight of water. I made my way back to the bow along the swaying footropes and clambered on deck, again bruising shins, this time on the heavy stock of the anchor. A bit disgusted with everything in general, I started aft, reaching for the shrouds to help me on my way. Without warning, the deck heeled over and dropped, stopping abruptly as the bow fell off a passing sea and thudded into another. My hand missed the shrouds and I tumbled across the cabin top and bounced against the mast with its protruding bronze fittings. I was thoroughly bruised from stem to stern and just about fit to be tied. At this moment there weren't words or actions strong enough to express my feelings so I scrambled below before anything else could happen.

W. C. Sawyer Photo



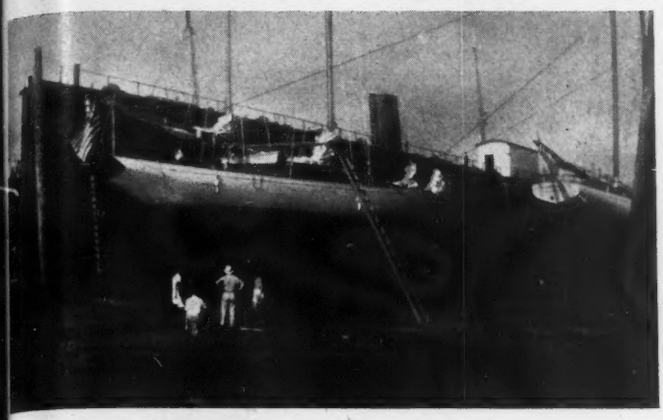
"Stella Maris II," a handsome and sturdy 54' ketch, was designed and built by her owner, Dr. A. A. Steele. Toward the end of the Honolulu Race the wishbone on the main let go

Such were the joys of yachting which we endured in our race against time and the elements to make the start of this long-planned-for Honolulu Race. We arrived at the scene of the start, Treasure Island, 24 hours before the starting gun, after being towed some 40 miles with our rudder frozen hard to starboard. This last mentioned item later proved to be the cause of our near-tragedy in mid-Pacific. But our misfortune of the moment was forgotten when we learned that three large schooners had been forced to turn back in the same weather we encountered and one had suffered a cracked foremast. Our chests assumed gigantic proportions and we comforted ourselves with the fact that we made it. But that was only the beginning. Then came the day and the hour — July 4th, 3:00 p.m. We set up the last of our chafing gear as we joined the many-sized sails dotting the bay around the starting line laid off the San Francisco World's Fair grounds. Twenty-six sailing yachts jockeyed for position. Seconds counted. . . .

\+ + +

With muscles tense we crossed the watery ribbon in company with the fast, quiet-moving yawl *Dorade.* Slowly she inched away from us and worked out to windward. We sailed on across the bay watching every move of every boat in our vicinity and drawing happy or perplexed conclusions according to the changing positions of the fast spreading fleet. Misty dampness from a low-hanging fog settled on the bay as we approached the Golden Gate Bridge. The slower yachts became obscure in the swirling mists astern and the first few boats, led by the big yawl *Chubasco,* disappeared in the murk ahead. At 5:15 we cleared our last channel marker outside the Golden Gate and headed off into the mist for the island of Oahu some 2200 miles to the southwest. Being a handicap race, we knew that every minute and even seconds might count at the finish. We quickly fell into the routine of watches and frequent sail changing as the breezes shifted during the night.

Our first morning at sea was bright and free from fog. The *Stella* moved quietly over a lazy sea topped with hazy sky. A huge red Genoa jib, which was destined to work wonders throughout the race and which pulled like a team of horses every time it was hauled aloft, became the first item of interest. By nightfall it was known to all as old Red Rover. Thursday and Friday rolled by with varying breezes and constant changing of sail. We spotted three of our competitors on our windward horizon; then lost them for a short time when they chanced to be in the path of a welcome squall which missed us and pushed them on ahead. A cutter hove in



"Stella Maris II" in dry dock at Honolulu, where her broken rudder was finally repaired

sight about sundown, appearing as a small pearl in the sunset as we were whisked into the night.

Saturday crept upon the *Stella* with an overcast morning showing us to be in company with three other competitors. Two of these, the yawl and cutter we had seen ahead the day before, were astern, the cutter being about a mile behind and the yawl close on the starboard quarter. The third boat, a yawl we had last seen shortly after the start in the pea soup fog off the Golden Gate, was so near our bow that we could practically hear toast crunching at their breakfast table. The wind was light, ghosting us along on a mirrored sea. We rolled slowly up astern of the yawl, sails flapping occasionally in the light airs. The crew of the yawl frantically trimmed and retrimmed their sails in an effort to stay ahead of the *Stella*. In their desire not to look at us from the stem, they even went to the bother of flying a bulky spinnaker which hung disgustingly limp, refusing to fill with the stray puffs of air. The *Stella*, extremely fast in light going, glided on ahead and the exhausted crew of the yawl waved a weak greeting. During the afternoon the yawl fell astern and was last seen down on the horizon to leeward.

When Saturday finally faded behind splotchy rain squalls, we were in company with four yachts, all within a five mile radius — 600 miles at sea! We took in Red Rover when the wind hauled astern and set a huge new parachute spinnaker containing 2400 square feet of silken material. The sail pulled with great power on its first venture skyward. We slid along and our bubbling bow wave steadily increased. The breeze freshened a bit, bellying out our spinnaker with nary a wrinkle in its bulging white bosom. Our fluffy dream was short-lived. Noiselessly, a large portion of blue sky widened the center section of the spinnaker as it split from head to foot down a seam. We sprang to our feet, as the rippling material floated over the driving bow, and rushed onto the forward deck. We lowered the head of the spinnaker and the whole mass of disheveled sail dropped squarely under the bow and trailed out astern in our foaming wake. Skipper Steele brought the *Stella* up into the wind and we hauled the dripping cloth in over the stern. We wasted no time in setting another heavier spinnaker, but we had lost a precious mile in harnessing our deflated dream.

Saturday night the wind freshened and before long turned into a good blow. We were out to make up for lost time with the spinnaker straining and swinging wildly in the wind on our starboard side and the mainsail 'wung out' on the port side. We roared along like an express train. Following seas rose up astern, lifted us forward with a rush and left us racing along their broad backs. Large foaming whitecaps broke close aboard to add to the noise of the churning bow wave. Steering under these conditions was anything but dull when a jibe could easily carry away masts and rigging. Each passing wave heaved our stern one way or the other as it rolled underneath, sent us sliding ahead. The masts cut sickening arcs across the dark sky. The stretching spinnaker whipped and snapped as it spilled wind, took in more, and lifted the 25-foot pole high in the night with taut guys straining under the tremendous pull of the wind. We raced through the darkness on a sea of foam and sometime later we passed both yachts which had lost us in the afternoon.

Sunday proved to be a workout. We spent the day putting the spinnaker up, taking it down, and jibing with the fickle breeze. That evening we lay in our bunks with large white spots before our eyes resembling swaying spinnakers. But, alas! no rest for the yachtsman. We were startled from sleep along about midnight when the wishbone, holding the top after edge of the mainsail aloft, flew apart and sent an odd assortment of nuts, bolts and washers bouncing off the cabin top. We climbed on deck in pajama pants, removed the wishbone from the mast and set the mainsail without it.

The next day brought a light northwesterly draft which gradually took on the semblance of a breeze. We were dead astern of a cutter hull-down on the horizon. Through the glasses we could see she carried a spinnaker which blossomed out first on one side and then on the other. We could only guess at her identity. Our radio was out of commission and we no longer heard the daily broadcasts of the boats' positions sent out over radiotelephone by the yawl *Contender*. We worked our spinnaker for all we could get out of it. In the middle of the afternoon, we came abeam of the cutter just as another smaller cutter slipped across our stern out of a curtaining rain squall. The wind dropped and left the three of us sitting there with sails slatting to the roll of the swells. The large cutter proved to be *Blitzen*, which eventually took the grand trophy for the race and also first place in her class. We wasted little time looking at each other for another zephyr wafted out of the northeast and we were off again, with the small boat leading our little fleet. The big spinnaker on *Blitzen* pulled intermittently but, when it did fill, it really brought results, and we trailed close astern. A rain squall swept

(Continued on page 80)

"The Light Opera Co. of the Pacific," which made up in costume for what it lacked in harmonics

PRE-TANK MODEL TESTING

Simple Towing Experiments in the Open Are Often Surprisingly Revealing

By A. E. LUDERS

A Navy 46-foot crash boat doing 39½ knots on her trials. This picture should be compared with the one below of a model of this boat in the towing basin

ONE OF the pleasures that temper the vicissitudes of the life of a ship or boat builder is the occasional opportunity to recapture childhood days by experimenting with small models. Many wrinkles and improvements, particularly for sailing craft, have been worked out on a convenient sheet of water with a small replica of the vessel being investigated — some of these models even being large enough to carry the experimenter.

It is surprising how, with comparatively small models, the approximate performance of the parent vessel can be forecast by simple open water towing experiments where accurate quantitative results are not expected. These will come later when regular tank tests are made. Recently, when the writer had an opportunity to develop a new design for an airplane rescue or crash boat, it was quite natural that the first step should be to make a small model of the proposed craft and, by towing this model, to obtain an approximate measure of how she compared in towing resistance, seaworthiness, dryness, trim, etc., with models of other vessels that had actually been built and on whose performance exhaustive data were available.

The experiments described here were somewhat crude, but they gave fair comparative results so that we knew that the final design was a good performing craft, the model of which could be sent to Washington for testing in the Government model basin where minutely accurate towing tests could be conducted, the resistance and trim of the model carefully measured and, from these figures, the speed and horsepower of the final full-size craft accurately calculated.

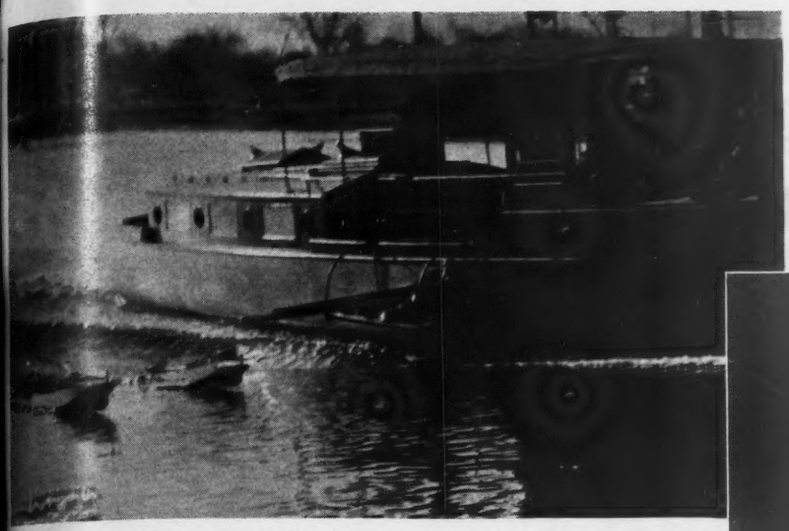
As a starting point in producing this new boat, we endeavored to improve the design of two 46-foot Navy crash boats that we had designed and built in 1935. These boats had turned out most satisfactorily, and the design was retained by the Navy as basic for a very considerable fleet of such boats built for war service. The experiments to be described were an effort to improve on this 1935 craft.

Incidentally, when the contract for these boats was awarded, a deciding factor was our guarantee of 47 statute miles per hour. This speed, in turn, had been calculated and interpolated from model experiments and final performance of a 66-foot patrol boat which we built for the Navy in 1916. That contract was awarded as the result of winning a nation-wide Navy design competition which was sponsored by the Government in an endeavor to develop a type of seaworthy fast motor boat that would appeal to and be built by yachtsmen and be readily convertible for patrol duty in the first World War, which was then looming on the horizon.

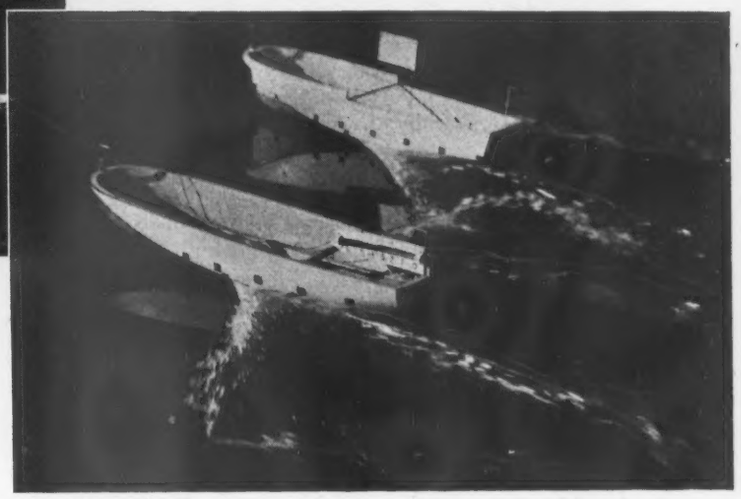
Of course, there was quite a bit of dissimilarity between the 1916 and the 1935 crash boat designs, but by careful analysis and some optimism a speed of 47 miles was decided upon as practicable. Subsequently, check experiments on a model of the design then under construction entrenched our forecast, and later this figure was confirmed, as one of the boats on official trial made 47.25 miles per hour and the other 47.33 miles, which shows with what confidence a naval architect may use reliable model data.

These boats proved most excellent running craft, riding extremely level, as shown in the accompanying photograph of the 46-foot boat. This should be compared with the photograph of a model of this same hull being tested in the model basin at Washington. This unusual level riding for a fairly heavy boat is partly the result of a slight reverse or hook in the after end of stern

Here the model of the 46-footer is being towed in the model basin, Washington, at a speed corresponding to 39.6 knots. Note how closely her wave making and trim compare to that of the full sized boat



The cruiser "You'll Do" towing two models, each attached to one end of a whiffletree on the outboard end of the towing beam. Note observer's platform on side of boat



Models under tow. The inside one is of proposed crash boat, and shows inclinometer. Outside model, "Annette R." With small models, the water squeezed out from under the bottom often takes the form of hugh bubbles, due to surface tension, which break into spray with full-sized boat

and chine which, by its reaction on the surface of the water over which the model passed, had the effect of raising the stern and lowering the bow. A drawback of this "hook" was the tendency of both boats, in spite of twin screws, to sheer off a straight course in a following sea, and this imposed a wearing ordeal of steering on the helmsman. Strangely, on these seemingly identical vessels, one boat favored running to port and the other to starboard.

Incidentally, while we have designed many entirely satisfactory high-speed motor boats with "hooked" buttocks and chines, it is a very tricky undertaking and generally to be avoided. It has produced some unsatisfactory boats and, while "level" riding is obtained, it is probably always at the cost of increased resistance and greater horsepower.

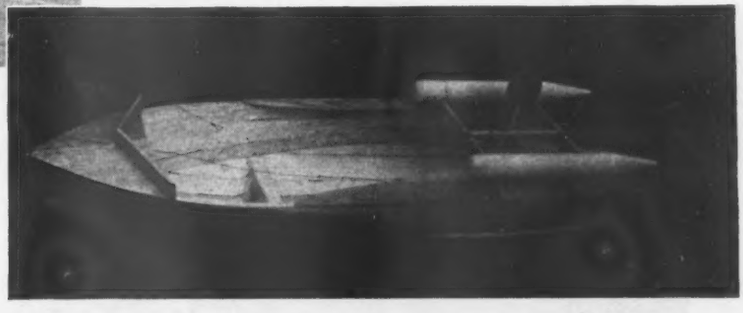
When the model of the improved 45′ crash boat was now ready for towing for observation of its performance, another model was made of an 18′ tender, the *Annette R.*, in order to have a real comparison. The latter was an exceptionally fine performer but was not suitable as a design for the new boats, as she had a broad stern to furnish buoyancy for the "Vee" drive Gray engine. If the new crash boat would balance with her propelling machinery in the more usual amidship position and would run as level as the tender, we would know that we had something. We retained our patented bow on this tender because of its dryness and the relief from flying spray that it gave, and also because it eliminates the usual nose-heaviness of speed boats in rough water at reduced speed.

From the lines of the *Annette R.* and those of the improved crash boats, two pine models were made, both of the same length, one-sixth of the full size of the proposed experimental crash boat, and these were ballasted to the same weight. The model of the crash boat was first towed alone by the 50′ cruiser *You'll Do* in Stamford Harbor at about eleven and a half knots top speed. On the model this corresponded to the finally desired speed by the crash boat of nearly forty-six miles per hour.

A towing boom was rigged on one side of the *You'll Do* so that the models could be towed clear of that vessel's wake, and the tow lines were made adjustable so that, by paying out or retrieving, the tow line could be made to take the same angle as the propeller shaft. This tow line was attached inside the hull, at the location where the shaft angle would pierce, and a gauge on the bow painted black and white gave the information that when the tow line met the intersection of the black and white boundary the shaft angle was being simulated.

The towing of the first model immediately indicated faults, such as a tendency to porpoise slowly or to pitch, and the riding angle was excessive and unsightly. Changes to the model gradually produced a well-behaved model with reasonable running angles. Targets were placed on bow and stern representing, by an imaginery connecting line, a level reference at rest. A rough check on trim could be obtained by photographs of the running model and

(Continued on page 86)

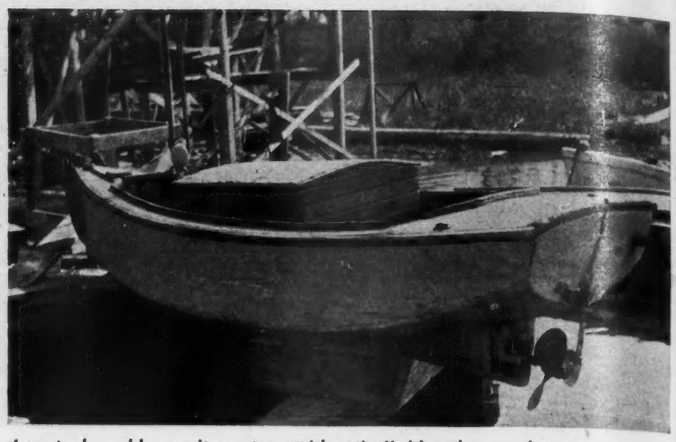


The 18-foot tender, "Annette R." Note similarity of running angle and wave formation to model above. Right, model with torpedos and target-controlled launching gear

WORKHORSE OF THE CHESAPEAKE

The Oyster Push Boats

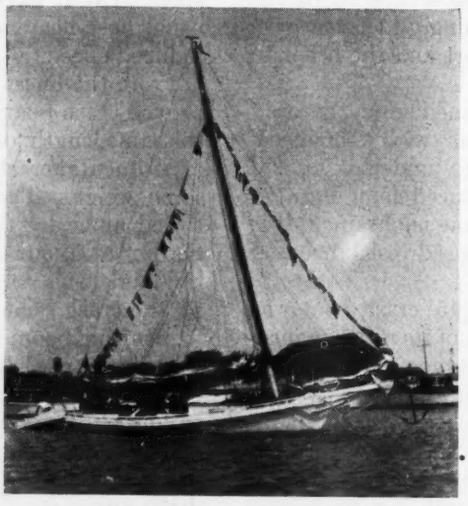
By J. A. EMMETT



A typical yawl boat, dimension 12' by 4' 6". Note her arc bottom and engine water cooling intake abaft the propeller

PERHAPS the hardest working boat for her size anywhere is the powered yawl boat or push boat of the Chesapeake. Stubby nosed and high sided, often as ugly as its mother ship is good-looking, she's a workboat pure and simple and, with her heavy-duty, single-cylinder engine (a home-converted Ford, or what have you) even 12-foot boats of this type will be found pushing not only dredge batteaux or skipjacks but loaded bugeyes and weighty lumber schooners.

With oystering regulations requiring dredging to be done under sail, the small and large batteaux, used solely for this purpose, rely entirely on a yawl boat astern for auxiliary power getting to and from the beds. Nor is inboard power at all common on Bay commercial sailboats of other larger types; the chief prejudice, perhaps, aside from the matter of cost of an inboard installation, being that many of the bugeyes and schooners which freight summers will be found dredging winters, when the propeller would have to be removed to comply with regulations and so leave the boat without power to use when off the beds.



When the yawl boat is in use, the padded bow is hoisted well up against the transom of her parent ship

Ranging from 12 by 4½ feet upwards in size, the majority of these yawl boats follow a pretty well standardized model: high straight sides and stem, with a fore-and-aft planked, arced or slightly rounded bottom, worked in by shaping the sawn bottom frames. The older boats especially are well built and most of them at least start out the dredging season nicely fitted out, even with varnished trim. Construction is naturally out of all proportion to the length of the boat, as the service is a hard one: very heavy sawn side and bottom frames and stout planking. The engine takes up most of the space inside the boat, car conversions being the most common installation. The forced feed water intake — the pipe led down into the propeller stream shows up in the photograph — is quite common. A rudder is seldom fitted, steering, of course, being done with the mother boat's wheel.

The weight of the outfit is the reason for the heavy overhanging stern davits of the Chesapeake with their complicated tackle for hoisting the yawl boat. With the boat lowered for use, the bow tackle is usually left in place to hoist the rope pudding or tire casing padded bow against the vessel's transom, perhaps bearing against a padded board there. Even though the larger bugeyes and schooners use short yawl boats, often not over 15 feet in length, good speeds are attained, four or five knots when loaded, six or seven, light; or comparable with what an average inboard installation would give. When used in rough water, the yawl boat method of power is at its worst for, especially when going to windward, she batters at the transom or gets beneath the quarters.

Then, under extreme conditions and when sail is resorted to, it may be impossible to hoist the yawl boat in her davits and, when towed astern at night, loss is fairly common through filling and sinking or breaking the line. Yet they are uncommonly good sea boats, all things considered, and they will do their best to tag along behind their mothers even when the weather is such that any self-respecting small boat should be moved out of harm's way.

For those of us who hate to see commercial sail gradually becoming a thing of the past and look to the Chesapeake as one of its last strongholds, the most dismal part of the picture is that the yawl boat is called on more and more for getting about, even with a fair but light breeze, and that sail is too often considered merely as a necessary evil to comply with dredging regulations.

Heavy stern davits and hoisting tackle for her yawl boat are fitted on this Chesapeake Bay dredge batteau

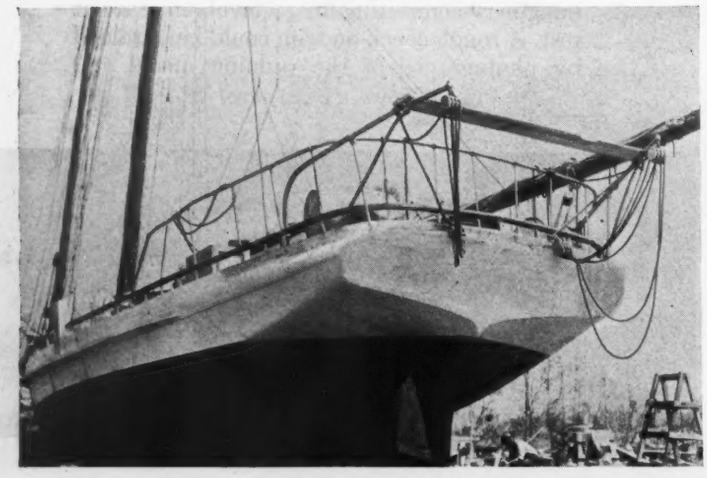


Photo Coert duBois

The windward coast of Barbados, where 3000 miles of trade wind piles up a never ceasing surf

WHY NOT TRY THE WEST INDIES?

Part III — From Martinique to Trinidad

By HERBERT L. STONE

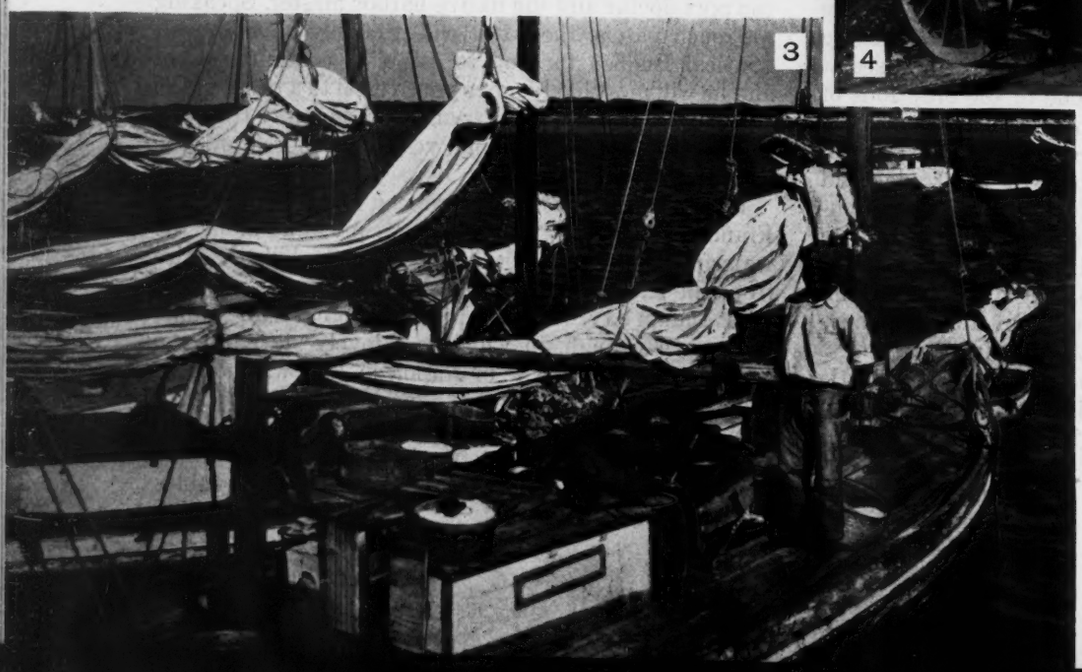
IN OUR cruise southward from St. Thomas through the Leeward and Windward Islands, we had reached (in the last installment) the French island of Martinique and had let our hook go off the city of Fort de France, on the bay of that name, and given the sails a harbor furl for a stay of several days. To do justice to Martinique, one will want to linger at least that long. But before telling of the lure of the southern city, let's go back aways to your run down from Dominica.

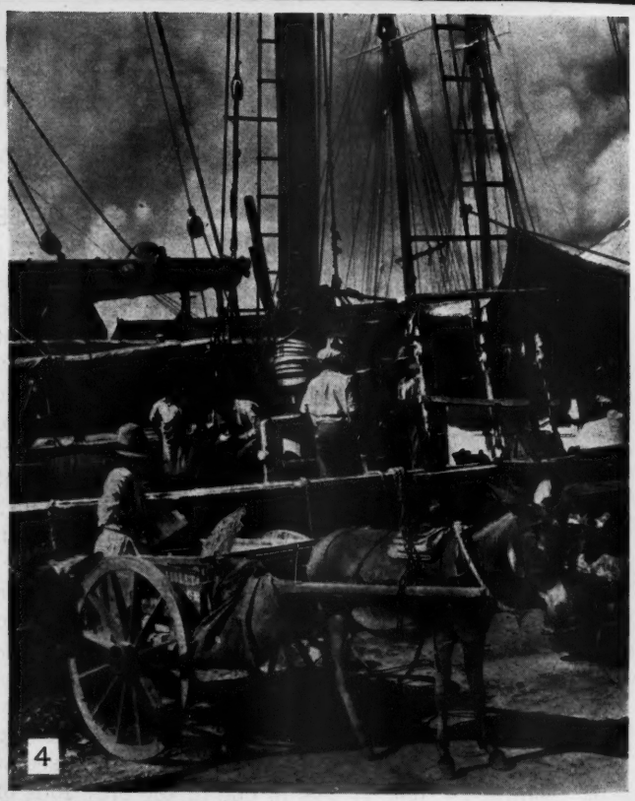
Sailing southward in the lee of Mt. Pelée and the 4000-feet high Carbet Peaks, one can stand close in to shore, just keeping enough offing to catch the trades as they blow over and down from the high, mountainous land. Coasting along the shore, first to catch the eye are the great lava slides from the crater of Pelée, slashing great scars in the foliage and dropping off into the sea at the mountain's foot. It was in one of the eruptions of this supposedly extinct volcano that the town of St. Pierre was wiped out, in 1902, by a gigantic explosion, the gases from which, blown down by the trade wind before the lava flow began, snuffed out the entire population of some 30,000 people in a split second. Only one ship in the harbor escaped. She had just let go her hook when the explosion came and, having a head of steam, she backed clear by letting the cable run, although those on her deck were overcome by the deadly gases.

The ruins of the town, formerly known as "Little Paris," and one of the gayest in the West Indies, are still to be seen, though the jungle has covered much of them, and the town has never been rebuilt. You can anchor off the little jetty and go ashore in your boat, or in one of the pulling boats that will undoubtedly come out to your ship, and the ruins of the old town and the wild scenery of the mountain slopes and ridges behind it will fill you with awe that an entire population could be snuffed out as that one was. St. Pierre was said to be the wickedest town in the islands and the people of Fort de France were said to have believed at the time that the tragedy was an act of God for its sins.

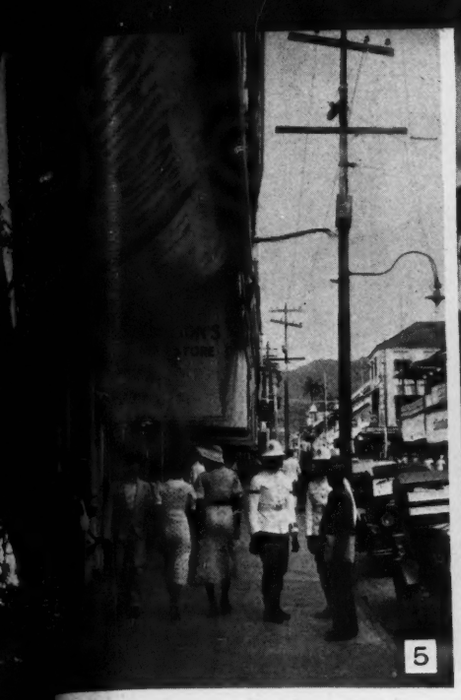
From St. Pierre roadstead down to Fort de France is only some 16 miles, and here the bay is large and one of the best in the West Indies. In it, lay several ships of the French Navy, from the fall of France in 1940 until the Vichy control was overturned in 1943. You will find the city picturesque and attractive. Your anchor will hardly be down off the town jetty than you will be visited by the port doctor and the native harbor master. Speaking a French patois, the latter will probably have enough nautical English for you to establish communication, and he will most likely move your vessel to a berth in the carénage, where it is quieter and you are away from the larger steamers and sailing vessels anchored off the quays.

Fort de France is an interesting city, like a bit of France itself in a tropical setting. Spreading along the waterfront, its houses reach back onto the hills that rise from the shore, so that it covers a lot of ground for a West Indian city. Near the landing, there is a fine public park, or savannah, in which is a lovely statue of the Empress Josephine, wife of Napoleon, who was born on the island. The narrow streets, with their stores full of French goods (in times of peace, but hardly now), are attractive; but most magnetic of all to the sailor, will be the delightful French cafés or bistros, with their tables



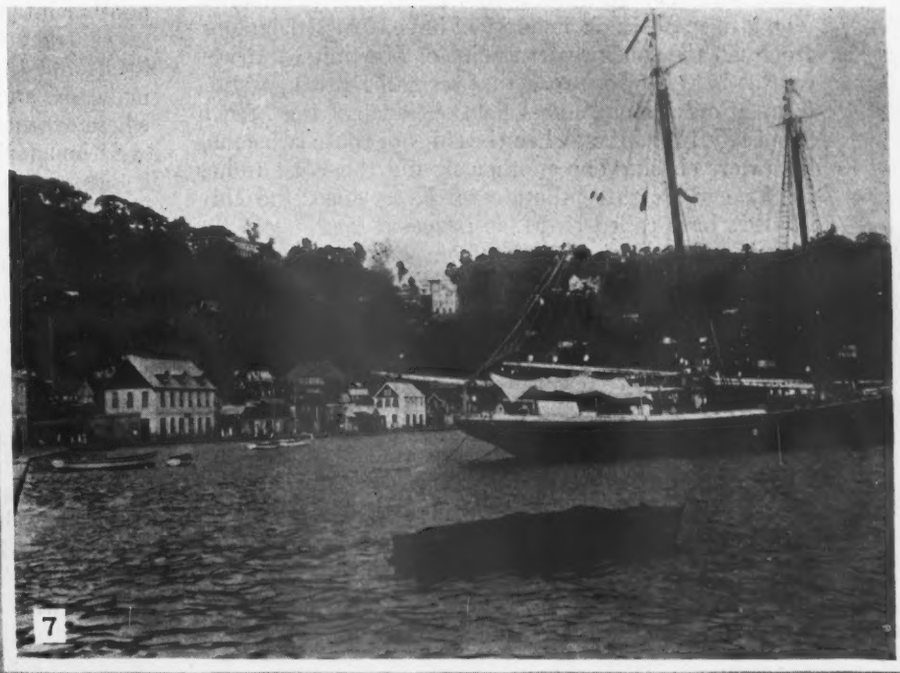


1. Leeward coast of beautiful Dominica from the Administrator's residence. Anglo-American Caribbean Com. photo. 2. Gathering coconuts on the beach at Trinidad. Three Lions photo. 3. Native sloops are pretty much the same throughout the West Indies. In spite of poor gear, they stand a lot of weather. Lamborne photo. 4. Coasting schooner discharging at quay, Barbados. Furness Line photo.



THE PAGEANTRY OF THE WEST INDIES

5. Frederick St., Port of Spain, was typical British West Indies colonial. Today, many United Nations' uniforms are seen. Photo Three Lions. 6. The Carénage is a basin extending into the city of Bridgetown, Barbados. 7. Harbor and waterfront, St. George, Granada. Photos Furness West Indies Line. 8. Old British naval base, English Harbor, Antigua, still much as it was in Admiral Nelson's time. Photo by Coert duBois



on the sidewalks, as in Paris, where one can sit and see the multi-colored traffic pass by as he sips his aperitif.

Martinique is some 40 miles long by 20 or so wide, and every inch of it is mountainous. But there are some good roads, and an automobile can be hired that will give you a glimpse of the most luxurious tropical foliage to be found anywhere in the world. A drive to the famous hot springs, which can be made (there and back) in half a day, will give one an idea of the interior of the island. There is usually a brisk amount of traffic in the harbor, with island sloops and schooners coming and going, or unloading their cargoes, and steamers making their port-of-call stops to discharge and load freight and passengers. For Fort de France is not only the largest city in the French West Indies, but the seat of government as well. When you finally get your clearance for Castries, your anchor aboard, and stand out of the bay to the southward, you will probably do so with a feeling of real regret. But there is a British island beckoning you only 16 miles across the St. Lucia channel. You'll raise St. Lucia before you have cleared Diamond Rock, off the southwestern point of Martinique. It was on this bold 600-foot rock that a small British garrison from Admiral Hood's fleet held out against the French for nearly 16 months, when the ships of those two countries were chasing one another around the West Indies in the early eighteen-hundreds. Ever since, the tiny islet has been called H. M. S. *Diamond Rock.*

It is only about 30 miles from Fort de France to Castries, some six miles below Pointe de Cap on the northerly end of St. Lucia. The current sets to the westward through the channel between the two islands, and one should hold up a bit to the eastward of the course so as not to get set down to leeward. Once in Castries, you will find it about the best protected harbor in the West Indies. It is well marked, narrow and deep, between high hills with the town of Castries lying to starboard as you enter. One can tie up here to a dock in quiet water, but there would perhaps be more peace if anchored off in Virgie Cove, across the harbor and away from the prying eyes of the unabashed citizens of St. Lucia. The island has been variously under the rule of the British and French, and, while English is now the official language, the people speak a patois that is difficult to understand.

The town, though small, is interesting and, while the island is not as rugged as Martinique, it is plenty rough,

Kingston, Island of St. Vincent, as seen from Fort Charlotte. Note anchorage, upper right, with its coasting fleet. Photo Coert duBois

and the roads are none too good in the interior. There is another interesting town, Soufriere, on the bay of that name, some 10 or 12 miles south of Castries. The bay itself, and the mountains that rise from its very edge, make the anchorage one of grandeur unsurpassed anywhere except, perhaps, in a Norwegian fjord.

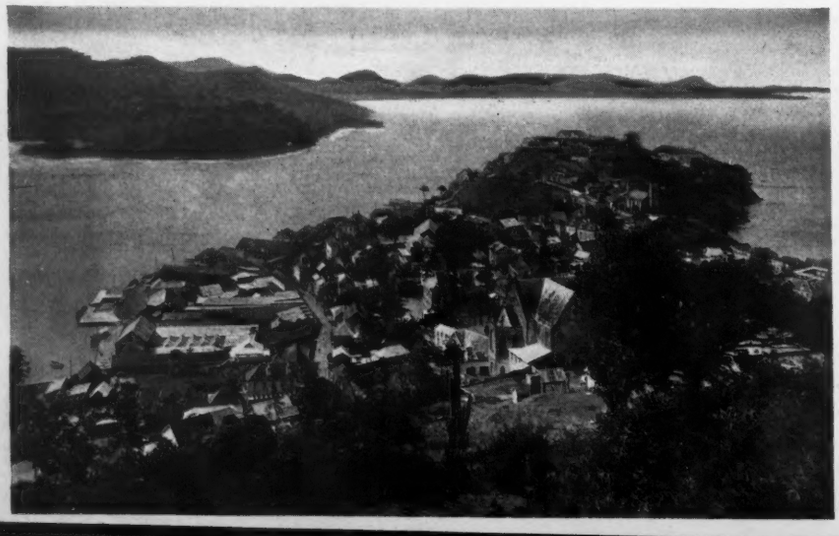
Although Barbados is the farthest east of all the West Indies, and lies some 100 miles southeast of St. Lucia, it is well worth the rough, and probably "dusty" passage from Castries. By going around the north end of St. Lucia and beating out through the passage until an offing is made, it should be possible to lay a course for Bridgetown, on the southwest end of Barbados. The wind will probably be forward of the beam and the sea rough, but once in the lee of Barbados, smoother water will be had. As compared with the other islands you have been visiting, Barbados is low. Nevertheless, the hills rise to a height of 1100 feet and you can pick the island up a good distance away.

Barbados has been called "Little England" and its chief town, Bridgetown, on Carlisle Bay, is English in atmosphere. The bay is an open roadstead, but is safe enough with the prevailing trades blowing, although there is usually a heave to the water. There is a basin, or carénage, that goes right into the city, and here smaller vessels may moor or tie up along the quays, as do the smaller island coasters and schooners to unload their cargoes. Here, also, is a drydock, or marine railway, where repairs can be made if necessary, and here gasoline and most supplies can be had. However, on major repairs, a yacht owner in the West Indies is considered fair game, and it is wise to do your bargaining first, and have the answer in black and white. Ships in distress have always been a source of profit to what few shipyards there are in the Windward and Leeward Islands.

Carlisle Bay is ideal for sailing and there is a yacht club at Barbados, with a mixed fleet of small boats, and an Aquatic Club, located on a pier over the bay, where meals and drinks may be had in the cool breezes that blow over from the windward side of the island. On this windward side, the surf beats and the winds are cool and heavy enough to give the palms a slant to the westward, but on Carlisle Bay, one would

(Continued on page 90)

St. George, Grenada, sprawling over the tongue of land that protects the inner harbor, at left. Photo Furness West Indies Line



THE POST-WAR YACHT

Part III — Not the Last Word, but Some Provocative Ideas Regarding What May Go Into Your "Dream Ship"

HAVE you ever taken the specification sheets of an average sized yacht and checked them over, item by item? No doubt you have, and in so doing have marveled at the fact that a pleasure vessel — the relatively specialized product of man's creative skill — consists of so great a quantity and variety of related pieces and parts. On the specification sheets the materials for the bare hull (which proportionately looms so large when the vessel is building) are dwarfed by list upon list of items of every imaginable kind, and which, collectively, comprise the boat's propulsion equipment, related interior or exterior fittings, and gear.

Or, to put it another way (all of this is leading up to the fact that Part III of this series has more ramifications than Mr. Heinz has varieties), take any representative marine equipment catalogue and check off the essential material, fittings, machinery, and accessories which would go into the building and equipping of an average 30-foot water line sailer, auxiliary, or motor cruiser. The result is astonishing, particularly when one realizes how the list would be further enlarged if one were to include all the supplementary equipment which, while not strictly essential, is highly desirable. All of which indicates that to-morrow's yacht will necessarily be the product of many trades and countless technological developments, and as a result it will take more than the first few months of peace to put what has gone into her to the most telling test of all — use by the nation's yachtsmen.

The topics which have not previously been discussed in this series, and are now up for analysis, are: propulsion and auxiliary engines; sails, rigging, and related gear; paints and compositions; electrical and navigational equipment; and miscellaneous fittings and gear of all kinds. The above incorporate the following basic materials: metal, wood (and compositions), plastics, synthetics, rubber, glass and fibres. It is impossible to more than touch on any one of these subjects, but future issues of YACHTING will contain articles relating to their marine use by outstanding specialists.

J. J. Fanta Photo

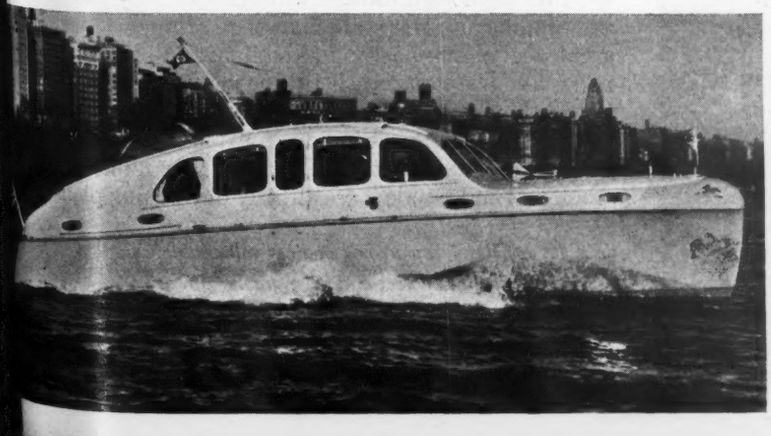
Will plastic blocks, nylon rope, tubular spars and impregnated sail cloth be on the specification sheets of a post-war yacht such as this staysail ketch?

Since the beginning of the war, the nation's marine engine builders have been accomplishing production miracles. And, while each of them has been steadily improving his product, war-time production requirements have prevented the perfecting of radical design changes or refinements. It is a fair statement to say that any extreme changes in the internal combustion engine will probably come after the war, and that the engines of the first post-war years will reflect operational improvements rather than revolutionary design changes.

Any discussion of inboard engines sooner or later leads to the subject of gas *vs.* Diesel.

"While it is too early to talk of 'things to come' in the field of Diesel power for pleasure boats," says John W. Mulford, of the Gray Marine Motor Co., "it is definitely indicated that many boats now powered with twin installations of gasoline engines will be repowered with two-cycle, high-speed marine Diesels after the war. This may be expected, not only because mass production of Diesel motors will result in lower prices, but because operating and performance experience of thousands of war craft has widened the scope of utility for Diesel-powered boats in general."

"Revere," the Dobson-designed and Palmer Scott-built all-metal cruiser, created a sensation in 1941. The hull itself was of cupro-nickel alloy; other metals employed were aluminum and duraluminum. Many builders and designers believe that metal hulls will be increasingly popular in the post-war years



Direction finders, fluorescent lights, radio telephones and galley requirements will undoubtedly be increasingly popular

Rosenfeld and *Chris-Craft Photos*

Volney Fowler, of General Motors, is also of the belief that the high initial cost of Diesels is the only thing that keeps them out of many pleasure boats "since we now have them down in size and up in speed to a point where they meet all ordinary requirements." He believes that the "controllable pitch propeller, developed by General Motors and manufactured by our Electro-Motive Division, is really something to conjure with as far as the pleasure boat owner is concerned. Controllable pitch propeller for wheel speed up to as high as 900 r.p.m. is here and working. It seems to me that the average boat owner would get lots of fun as well as profit in the way of fuel economy and increased performance out of the forward or backward control available through this propeller."

The "pancake engine" idea, in the opinion of J. T. Borton, U. S. Motors Corporation, has great possibilities for future pleasure boat use. There is also a growing belief on the part of both architects and engineers that speed will not be the primary consideration of the average boat owner. "The tendency to higher speed," states W. M. Griffith, of the Atlas Imperial Engine Co., "has not only resulted in higher first cost but higher operating cost. Furthermore, a high speed hull does not make for seaworthiness or comfort, and I believe that speed and lack of comfort have caused many to give up yachting.

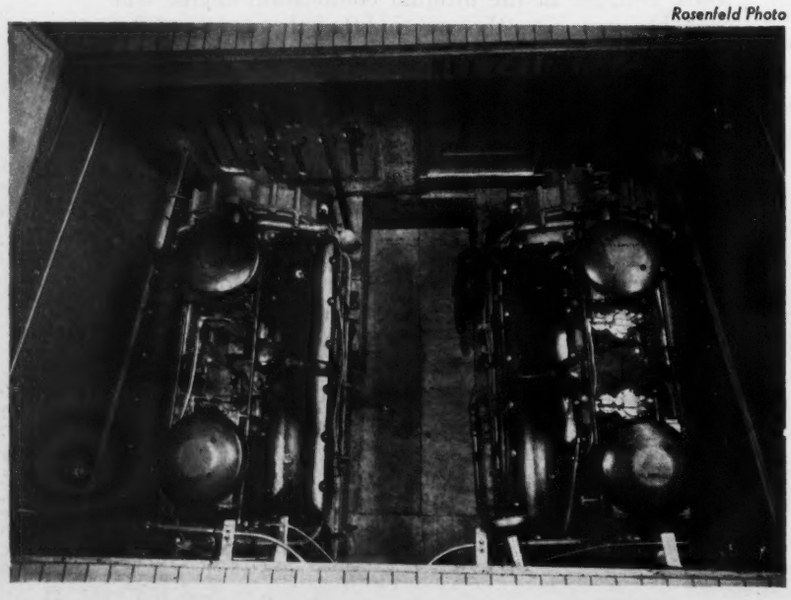
"It is my belief that in the post-war period the tendency will be toward more seaworthy and comfortable boats with cruising speeds around twelve miles per hour, using about one-half the horsepower now used but applying it more effectively so as to get greater efficiency. Since the introduction of the small high-speed engine, there has been a tendency to apply power at too high or improper propeller shaft speeds, resulting in very low efficiency."

Frank Pembroke Huckins observes that "in the past, engines have been built in an attempt to make them suitable for everything from a tow boat to a planing hull. In the future, for the fast boat of the post-war period, engines must be built far lighter, with greater use of aluminum, and with an abandonment of ponderous reverse gears in favor of gears more suited to the purpose." Irving Jakobson presents the interesting idea that tomorrow's engine will be a modern power plant ". . . perhaps a combination of small Diesel electric generating sets driving one propelling motor. The generating set can be placed in sound-proof compartments located to best suit the interior arrangement of the boat. The propelling motor, being small, would take up a minimum of room and would not crowd the cockpit, galley, or after cabin, as was the case in many of the pre-war boats. Generating units and propelling motors will be mounted on vibration insulators. Engine repairs would be a simple matter . . . simply removing a generating set unit and replacing it with a new one; since the cost of the new unit will be less than the labor expended to make a complete overhauling job."

E. Lockwood Haggas is another one who believes that tomorrow's motor will not reflect any radical changes, with the possible exception of the high power types of semi-aviation design. "But," he says, "if some engine manufacturers would produce good horizontal opposed motors — in sizes from 15 to 150 hp. — they could be used to excellent advantage. This is an old idea but the time is ripe for its return."

Strong support for the idea of more extensive employment of outboard motors in the post-war period is voiced by H. I. Chapelle, who is also of the opinion that air cooled motors will increase in popularity. Significant is his statement that "there will be a great deal of emphasis on reliability and ease of repair." There is certainly little question but that both the outboard and the small air cooled motors will play an important rôle in powering a wide variety of post-war boats, and it is well known that numerous architects and builders are already developing plans

Rosenfeld Photo



Be it gas or Diesel, tomorrow's engines will certainly be lighter, more compact and have greater power

U. S. Plywood Corp. Photo

This mast was molded of plywood, and many architects think that yacht spars will be formed in the same way

for small cruisers and auxiliaries which will be propelled by them. *The Outboard Has Gone to War* (page 30 of this issue of YACHTING) gives some idea of how naval and military employment of all types of portable motors is proving a valuable testing ground for their peace-time use.

For many years, the "gas turbine" has been considered to be just over the horizon. It has been the subject of renewed discussion in recent months, and it may be that the next few years will see it an actuality. One of those who thinks so is Lieut. R. T. Miller, who says that "rapid strides have been made . . . in its development, and it should be available in the larger horsepowers soon after the war. The turbine is a rotary engine, hence it will not have the vibration found in reciprocating engines. Since the expansion of the burning gases will be relatively slower and more complete in the turbine blading than in the cylinder of a reciprocating engine, the turbine will approach the quietness of steam operation."

The Matthews Company is another organization that anticipates a greater demand for Diesel power after the war. "The tremendous production of Diesels during war time," says R. E. Reynolds, "should reduce their cost greatly and should certainly iron out whatever bugs they may have had before the war. There should be a large demand for this type of power because of the cheaper operating cost and because of the high safety factor." A note of caution is expressed by E. G. Henderson, of the Universal Motor Company, in his statement that "a grave injustice can be done to the boating industry and to boating as a sport if the public is allowed to become misguided as to what they should expect in post-war marine engines. To be sure, there will be new models and improvements, but they should not anticipate radical changes in designs, or the addition of many gadgets. We have new models under way and numerous improvements to be announced, but our engineers are keeping ever in mind that in building power for boats we are dealing with the elements, and that rugged dependability always was and must be the prime consideration in marine engines."

It is probably a fair assumption that there will always be two schools of thought insofar as auxiliary units — which supply power for heating, cooking, refrigerating, communication, navigation, and lighting — are concerned. One group of yachtsmen is blissfully happy with nothing more than a kerosene lamp, a wooden ice chest and a fisherman's horn; the other is constantly on the alert for supplementary equipment which will enable their vessels to be complete to the *nth* degree. Today there is every indication that it will not be long before most skippers, be their craft 30 foot or 130 foot water line, will want and be able to get light weight, easily operated and low cost auxiliary units of variable sizes.

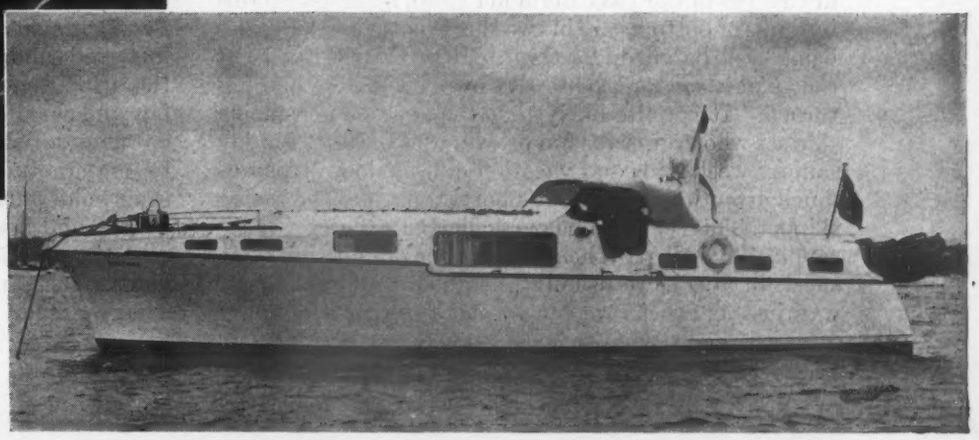
"We shall," says Henry Nevins, "see navigation development that has been perfected during the war put on yachts. Some spectacular things have been done with radar; radios will be much more effective and all such appliances will rapidly come into use." The Jefferson-Travis Radio Manufacturing Co. foresees the day when "every type of craft, commercial and pleasure, will of necessity be equipped with radio-telephone. The design of these models will harmonize with the design of the boat, incorporating the simple, practical and attractive lines that will be the keynote of future blueprints. The increased use of remote controls will be another post-war feature. Models, in many instances, will be entirely concealed and remote control units will be located in convenient, accessible spots aboard ship.

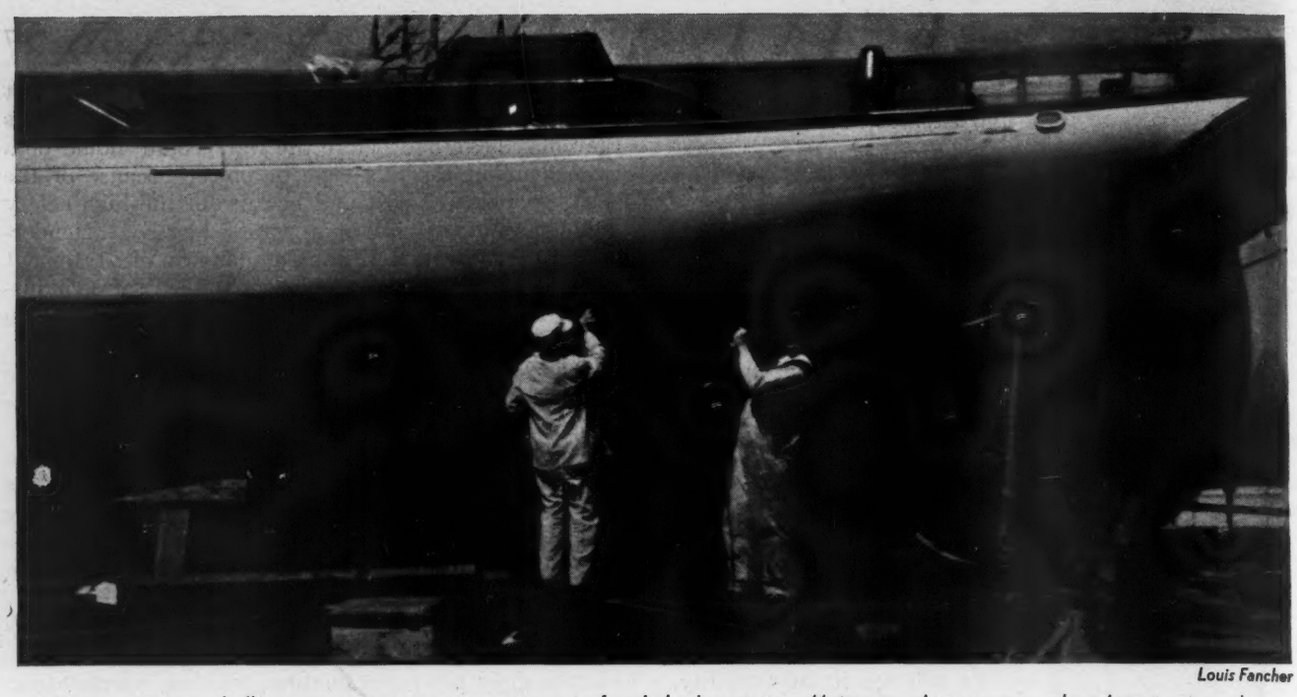
"Another feature of the post-war radio equipment will be the elimination of unsightly antennae; at the present time there is a new type of aircraft antenna which utilizes simplicity of design and which may well

(Continued on page 102)

Above, chemistry is becoming the yachtsman's handmaiden. Here are brush bristles, sail ties, and various sizes of line — made of nylon

Below, this British cruiser is an excellent example of modified streamlining. Batting Photo





Louis Fancher

Large quantities of elbow grease are a prime requirement of underbody painting. Moisture and temperature also play a major role

KEEP THAT BOTTOM SMOOTH!

If You Are Going to Paint Your Boat's Bottom Yourself—Then Do it Properly

By CHARLES FISK

MANY a time after a race is over and the competing skippers gather around a table in the club and sail the race over again on the table cloth, the whole crowd wonders why a certain boat, apparently a sure winner, blew the race. And many a second-place skipper, who knows he should have won, tries to figure out why he didn't. So many races have been won and lost by a mere matter of seconds that we couldn't begin to list them even if we had the records.

There is one contributing cause to lost races that some skippers frequently forget. That one factor is skin friction caused by rough, uneven underwater surfaces and by barnacles, grass and whatever else may become attached to a boat's underbody. Most out-and-out racing skippers are just as fussy about their boats' bottoms as they are about their above-water line gear and their sails. The late Carl Weagant, of YACHTING's staff, who sailed with Russ Alger on *Baccarat* when she won in Class B in the 1934 Bermuda Race, summed up this business of bottom care in two short sentences: "Besides being well handled, *Baccarat* had good gear, well cut sails and a *smooth bottom*. Her owner left no stone unturned." It is quite likely that the average non-racing skipper who cruises for fun or who uses his boat for day sailing, week ends and vacation cruises doesn't pay as much attention to his boat's bottom as does the racing skipper. This seems to be particularly the case with the smaller day-sailers. When limited time does permit us to sneak in a sail, we usually pile aboard and get under way just as fast as we can to make the most of every minute. Then maybe we lose minutes, or distance under way, because the boat doesn't move as fast as she should.

This year, many more of us will do our own work — our smoothing up, our seam jobs and our painting. A majority of the boatyard men who formerly put our boats in shape are now busy on war work, so let us take a look at the average bottom job which is on nearly every skipper's spring schedule. Begin with the stem. Have you ever hit anything when your boat was snorting along with a bone in her teeth? A big chunk of driftwood, an old crate or a meandering lobster pot? Your boat may have received some good sized dents or bruises along her stem, along the entering edges of her deadwood, or on her keel or centerboard. All such dents set up underwater eddies that add to the skin friction. They're good places for barnacles and grass to grow. The lighter the wind and the less the boat's speed, the greater the skin friction factor.

Scrape all dents and bruises clean of paint and, if they happen to be in the wood, make sure that no rot has set in. Clean up the edges and with either plastic wood or trowel cement fair the edges so that they follow the lines and sandpaper them smooth. Next, check over all the after edges, particularly the rudder, and then fill, fair and smooth them as described. Blunt, square edges on many a rudder add to underwater drag which could be materially reduced if they were streamlined. The same holds true for the after and bottom edges of centerboards and keels. Generally speaking, the man with a centerboard boat doesn't have to worry as much about damage sustained from bouncing off hidden rocks. Moreover, we're not concerned here with the results of major

Elon Jessup Photos

Caulking is an art. Each tap of the mallet must be sure and true

damages sustained in such a crack-up; we're discussing the dents and gashes that you can and should repair yourself in case your yard is too busy to do it.

Very often such underwater damages can be fixed easily and quickly. Trowel cement is usually the remedy. After you've cleaned the dents, you knife the trowel cement with a putty knife. Trowel cement is a mixture of white lead, whiting and fillers; some manufacturers add asbestine. After the materials are ground together, a vehicle which can freely be described as an oil and varnish mixture is added. Trowel cement comes thick, almost paste-like, in the can so that it can be "troweled on." It can be used on either wood or metal surfaces and is fairly porous and sets up quickly. It can be bodied up for heavy coats with whiting or thinned with turpentine or a special thinner supplied by the manufacturer. Before using trowel cement, be sure to read the directions on the can. When you use trowel cement on bare wood, it is necessary first to put on a coat of primer or trowel cement "undercoater."

To smooth up a metal keel or centerboard, wire brush it vigorously to remove old paint, scale and dirt. Then sandpaper with a coarse sandpaper. If the surface to be finished is iron (not lead) it should first be coated with vinegar to dissolve all oil and grease. A good surface preparation for galvanized iron can be made by mixing copper sulphate and fresh water — a pound of sulphate to a gallon of water. A coating of this solution should turn a galvanized surface black. If the first coat doesn't do it, apply another. After it has dried, wash with fresh water.

If you are working on iron, the next step is to coat the surface with two coats of a chromate type iron primer as a precaution against electrolysis. When the second coat is dry, you are ready to apply the trowel cement. Let us assume that you may be working either on a lead or an iron keel, for the application of the trowel cement on either type is the same. Trowel cement is intended to provide a smooth base for the bottom paint as well as to fill in hollow spots. On a small area, you can apply the material with a springy putty knife. For larger areas, use a rectangular-shaped trowel. Experiment first on an old board to be sure that the working consistency of the material is right. The trowel coat should not be more than $\frac{1}{32}$" or $\frac{1}{16}$" thick. Frequently, a good job consists of two coats, the first troweled on and sandpapered when dry, and the second thinned down and brushed on like a paint. Always keep the edge of your putty knife or trowel clean so you can spread the material smoothly. Before you thin the trowel cement for a brush coat, read the instructions on the can. Some manufacturers recommend the use of their own thinners, others, the use of turpentine. The proportion of turpentine is about a quart to the gallon of cement. When dry, trowel cement surface is an ideal base for the application of bottom paints.

Practically all small pleasure craft are caulked with cotton wicking. Examine the old seams carefully and if the old seam is brittle, don't expect it to hold. Take it out. The caulking underneath may also be gone. I have made an excellent seam-cleaning tool out of the tang of an old file, and wouldn't be without it. I file a hook shape into the tang and file the inside of the hook sharp, so that the cutting edge is in reality a combination curved chisel and hook. This home-made tool both hooks out and cuts the old caulking at the same time. Use it carefully at first so that you do not cut into the edges of your planking. After you have cleaned out the seams, gently tap in your new caulking with a caulking iron. Don't pound it in, as tight caulking may spread your seams once the boat is in the water and the wood swells. Don't use oakum as a caulking material. It is used principally for heavy marine work, big vessels and floats, where the planking is at least $1\frac{1}{4}$" thick.

On many small craft caulking cotton isn't used, as the planking is thin, the seams are close and good care has kept them that way. In many such instances, a good seam compound will suffice. I have heard of a number of cases where marine glue, thinned a little and applied with an oil can has done a fine job. If you try this method, make sure what thinner to use. I own a beautifully planked sloop with no cotton in her seams, and use plain white lead putty for seam filling with excellent results. Be sure paint is put into the seams before you put in your cotton caulking compound or putty. Unprimed seam edges would soak up the oil which is in most seam compounds and cause it to dry out and become brittle. Leave the seam just a tiny bit hollow. This is sometimes easier to say than do, particularly with very small seams. This procedure is advisable for, when the boat gets into the water and the wood swells, it will push

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There is more to it than "slappin' it on and shovin' her over." Each coat should be applied with painstaking care

SAILS AND SAILMAKING

Part I. The Historical Background of a Great Craft

By W. H. de FONTAINE

HOW many men, I wonder, as they hoist their sails, stop for a moment to consider that they are about to employ one of the oldest known methods of transportation? It is recorded by Plutarch in what is, perhaps, the earliest piece of yachting news in history, that when Cleopatra (first of a long line of yachtswomen) went sailing on the river Nile, "She came in a vessel, the stern whereof was made of gold, sails of purple silk and oars of silver" (a motor sailer, no doubt). Not only that but harmony afloat was in evidence, for Plutarch further reports that, "She placed herself in the stern under a rich canopy of cloth-of-gold, habited like Venus rising from the sea, and with beautiful boys like cupids fanning her, she listened to the sound of music." Yachting has been deteriorating from that day to this.

The first sail maker of which I have record was Odysseus who, you will recall, got away off his course in the Mediterranean and was wrecked on a foreign shore. Here, according to the bard Homer, who wrote the story of the cruise in about 1000 B.C., he made the acquaintance of a charming lady named Calypso, thus setting a precedent which sailors have been faithfully following from that day to this. It appeared, however, that Odysseus had work to do at home so, with the aid of Calypso, who provided him with the necessary tools, he proceeded to build himself a boat. When he had completed the framing and planking and got her overboard, his fair friend, according to Homer, "brought him web of cloth to make him sails; and these too he fashioned very skilfully. And he made fast therein braces and halyards and sheets." This was handicraft of a very high order and that is what the making of sails has remained to this day.

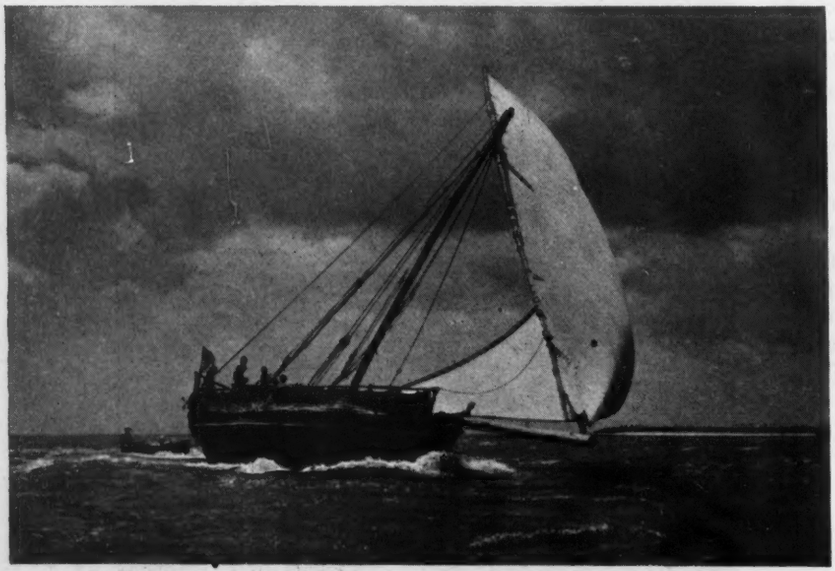
Sails were used not only for pleasure and adventuring in those far off days but also for the carrying on of commerce. I think that it could be maintained that the introduction of the use of sails has had as far reaching an effect on the history of the world as, perhaps, almost any other revolutionary invention through the ages. What the invention of the wheel was to land transportation, the introduction of sails must have been to sea borne traffic.

The glory that was sail! A Clipper running before it in the Trades with stun'sails set. From a painting by Charles R. Patterson

The Phoenicians, a race of Semitic traders who became the leading sailors of their time, made voyages for tin from their homes on the north African coast, through the Pillars of Hercules (the Straits of Gibraltar) as far as the British Isles. It is probable that their tales of travel influenced the Romans who invaded Britain before the Christian era, thus starting a train of events that has had a profound effect upon world history.

Perhaps the New World would have been discovered by someone in a canoe, but I doubt it. It was a sail that carried Lief Ericson to the shores of North America, and it was sails that made possible the voyages of Columbus. The great age of exploration and the later era of settlement, development, and trade were entirely dependent upon the use of sailing ships. The British Empire was built by men who went to the far corners of the earth in sailing ships, and the great historic naval battles were fought in ships that were handled by sailors while the fighting went on all about them. Then, of course, there was the day of the whale ships which carried Yankee sailormen to the South Seas and to the Arctic — under sail.

But the great age of sail came in the middle years of the last century with the development and perfection of the clipper ships. Surely man will never see a more soul stirring sight than one of those towering ships, with stun'sails set,

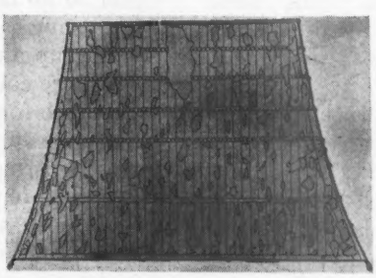


A trading vessel on the African coast. The rig resembles in many respects its forbears on the Nile in the days of Cleopatra. From a photo by Robert C. Gilfillan

"Santa Maria," whose full cut square sails and lateen mizzen give little hint of the great developments to come in sailmaking. From a painting by Claus Bergen

bearing down upon him in the north east trades.

The development of the steam engine finally put an end to the golden age of sail, and today, with a few minor exceptions, its use for commercial purposes is a thing of the past. The privilege of carrying on the great traditions has devolved upon the man who sails for pleasure. A proud heritage it is, and one that has been discharged in a true and seamanlike manner by our long distance cruising and ocean racing men; a crew who have put aside sailing for pleasure and are, for the duration, in their country's service on every fighting front. But when sanity again rules the world, and a man can call his life his own, these men are coming home with a yen to see far places, to get off in their own vessels where they will be lord of all they survey and where no man can say them nay. Then the sea will be dotted with the white sails of cruising yachts and quiet harbors will resound to the songs of sailors back on the sea. There will be such a renascence of sailing as will surprise the world.



Sail from Nelson's "Victory" after the battle of Trafalgar, showing shot holes. This sail was made by Ratsey at Cowes

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In early days, the best material for the sails of ships was flax, although hemp and ramie were also used to some extent. The British Admiralty, who were undoubtedly the world's greatest users of sailcloth, were most particular regarding the specifications under which canvas was produced for the Royal Navy. Published in the year 1796, *The Art of Sailmaking*, quoting from the Parliamentary regulations of the time covering the manufacture of sailcloth for the Royal Navy and the Merchant Marine, says, " . . . and the warp and shoot yarn shall be wrought in every piece per bolt, and the first four numbers of such sailcloth shall be made of long flax . . . and no flax yarn used in any British sailcloth shall be whitened with lime." So you see that the authorities were vitally concerned with the quality of sails that were to canvas the naval and merchant vessels of the day. The same volume gives some interesting data on the method of grading sailcloth weights in the latter part of the 18th century. In those days, naval canvas was 24 inches wide and all bolts of cloth were supposed to be 38 yards long. There were eight different weights specified from No. 1, weighing 44 pounds per bolt, to No. 8 weighing 21 pounds. The graduation between weights was from three to four pounds per bolt.

For several centuries, the flax from which the best sailcloth was made was grown in Ireland, England, Holland, Belgium, France, Finland and Russia. Before the war, the raising of flax was still an important agricultural pursuit in most of these countries, England excepted. As so much of her former production had been devoted to the making of sailcloth, the decline of flax growing in England may be attributed to the decline in the use of sailing ships and to a shift to cotton duck sailcloth.

It has been said that history repeats herself and, in this connection, it is interesting to observe certain parallels. In the reign of Good Queen Bess, persecution of Protestants in Flanders drove thousands of Flemish refugees to England, and among these people were many weavers, for weaving was an important trade in Flanders. The introduction of such highly skilled artisans into the industrial life of England undoubtedly contributed much to that supremacy which has permitted Britain for so long to rule the seas. Again, in the year

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"Edlu II," a modern, ocean racing yacht showing her flat cut main and mizzen for windward work and her full cut light sails for running and reaching

THE BIOGRAPHY OF A DESIGN

The Sequence of the Development of a Small Cruising Motor Sailer

By GRAHAM CAMERON, Lt., USNR

THIS is the biography of a boat. Herein is an attempt to catalog, clarify, and coordinate the factors and stages in any design for "The Perfect Boat." Here it is hoped to so analyze and sift the merits and demerits of design features and fixtures that, once construction is begun, precious time may be saved. As it should be, the boat is being designed with a definite purpose in view. She is to be used by the writer and his wife on a cruise of eight to twelve months' duration, making the circuit of the East Coast, the Hudson River, Great Lakes, Mississippi, and Gulf Coast waterways. Future cruising probably will be on protected waters of the East Coast, the Caribbean, and Canada. Since all design must be a compromise to some extent, certain features will be sacrificed in favor of others.

As in any biography, it is necessary to begin at the beginning of an idea for, just as a ship is a living thing, so she is alive long before she is launched. Her conception may be years before a plank is cut or even a line laid down. Therefore these formative years, these dreams and plans, are as much a part of her life history as is the story of her first cruise, and so I shall recall what I can of them now.

Any boat designed for a particular use is the result of the cumulative experience of the one for whom she is to be built. Going back some thirteen years, I made my first cruise on the waters near Hampton Roads, Virginia, in a 14-foot outboard runabout. This first venture proved to me that cruising in small craft was entirely feasible. Then followed a period entirely devoted to commercial aviation, and it was not until seven years later, while living near Fort Meyer, Fla., that I got my second taste of cruising. This time, it was in a 22-foot, round bottom power cruiser named *Sea Rabbit*. She was built from prefabricated frames, took us nine months to finish, and would do 27 knots when opened up. In her, we cruised from Florida to Washington, D. C., a distance of some 1500 miles. Her first long cruise was her last, but she taught me many valuable lessons.

All my experience so far had been with power alone. In 1941, I was commissioned a naval aviator and stationed at Pensacola, Fla. Finding a 15-foot white cedar skiff, with flat bottom, for sale, we bought her, gave her a centerboard, mast, a gaff-rigged mainsail, overlapping jib, rudder and an outboard motor. As a result, I had my first "motor-sailer." She was called *Grabob*, and in her we learned to know the rivers and bays of the Alabama and Florida coasts and to realize the value and the joy of being able to use both sail and power.

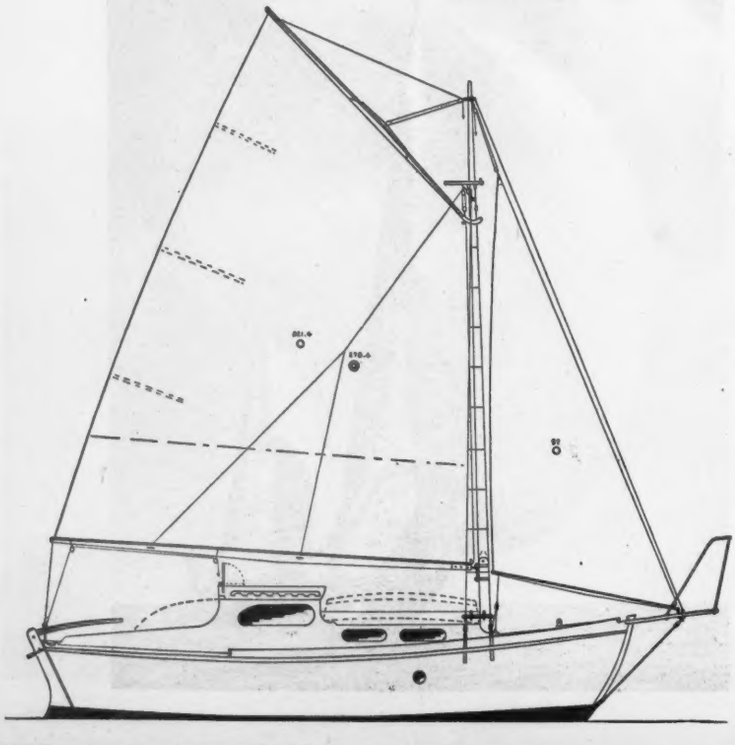
Returning to the New England coast in '42 and '43, after the United States was in the war, I had some restricted day sailing in a rented catboat and an 18-foot jib-headed sloop of Duxbury breed.

While December 7th, 1941, put an end to cruising for a time, no war lasts forever and what better dream is there to work and fight and fly for than the freedom again to go cruising in one's own boat. To hoist sail, with a snug cabin and full stores below, with the course opening up ahead and even time itself "unrestricted," what more could one ask?

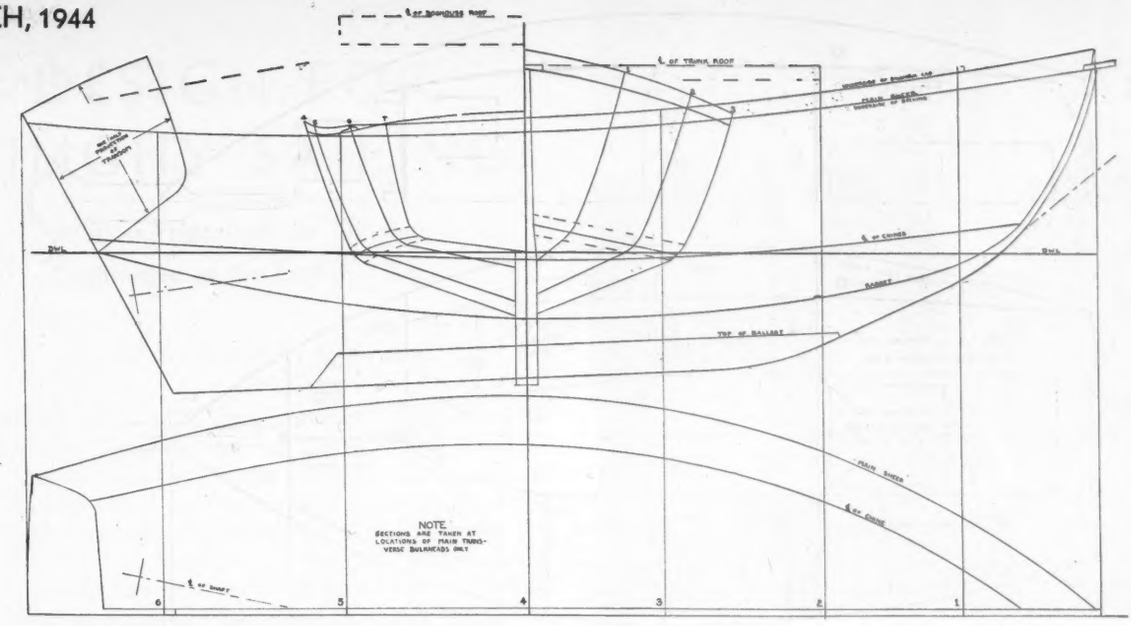
So much for the actual background of sail and power cruising behind the present plans. Something was learned, perhaps even unknowingly, from every mile and minute of it and an attempt has been made to apply these lessons, as well as the experiences and observations of others far more experienced than myself, wherever this data could be gleaned from book or periodical.

The first realizations of the general size and type of boat most suited to my desires — should I ever be able to have such a craft — dawned gradually about 1941, after my first experiences with sail when cruising in the gaff-rigged, outboard skiff *Grabob*. Even earlier, in 1938, with *Sea Rabbit*, the 22-foot cruiser, I had felt that a moderate amount of sail would have been desirable but, until *Grabob*, I had not had any actual experience with combined sail and power. Now that I had tried it, I had found it good; and I had found also that I preferred a small boat for, to me, the joys of poking into strange rivers and coves are among the major delights of leisurely cruising. A hull of twenty to twenty-seven feet over all length, with as much beam and as little draft as possible without sacrificing too much seaworthiness — these were the general requirements. Beam was needed if one were to live aboard in comfort; so was some degree of headroom, at least in the galley. To obtain the latter with shallow draft was a problem. This was solved by employing fairly deep sections amidships with a shallow keel and a doghouse over the galley.

About this time, a design was published by Roland Cueva of an 18-foot, V-bottom, plywood auxiliary sloop.



She is to be used by the writer and his wife on a cruise of eight to twelve months' duration, making the circuit of the East Coast, Hudson River, Great Lakes, Mississippi and Gulf Coast waterways



Her dimensions are 23' 6" o.a., 19' 8" w.l., 9' 6" beam, and 3' draft. Displacement is 3,789 lbs. and the sail area is 278 square feet. The author prefers a small boat for, to him, the joys of poking into strange rivers and coves are among the major delights of leisurely cruising

She was jib-headed, with a centerboard. The general construction — with the exception of the centerboard — appealed to me, including the simple, air-cooled engine with reduction gear. Years of working with waterproof plywood in aircraft construction had demonstrated the possibilities of this material, as well as its limitations, and I planned to use it to its fullest extent throughout the construction of the new boat.

At first, it was thought that the Cueva design could be used, gaff-rigged and with a metal keel substituted for the centerboard, but more room was needed and, realizing that a design could not be simply enlarged without a thorough knowledge of naval architecture, published plans of larger boats were sought. John Hanna's 20-foot *Poco Dinero* with her gaff rig and heavy keel was very nearly the answer, but she seemed a little on the heavy side for use on the inland waters it was planned to cruise.

The obvious next step was that of combining the desired features of several designs. Again it was realized that this could be dynamite for the mere yachtsman, uninitiated into that holy and secret circle of N.A.'s who juggle buttock lines and diagonals with ease, and speak casually of the Trapezoidal Rule and Simpson's Multipliers. What to do? The following step, likewise, was obvious: master the basic principles of design, insofar as they applied to the type of V-bottom hull under consideration and, then, guided by good practice — as obtained from similar published designs, common sense, and by the requirements already determined, design our own hull; checking with the necessary calculations, and perhaps with a sailing model, for the essentials of balance and performance.

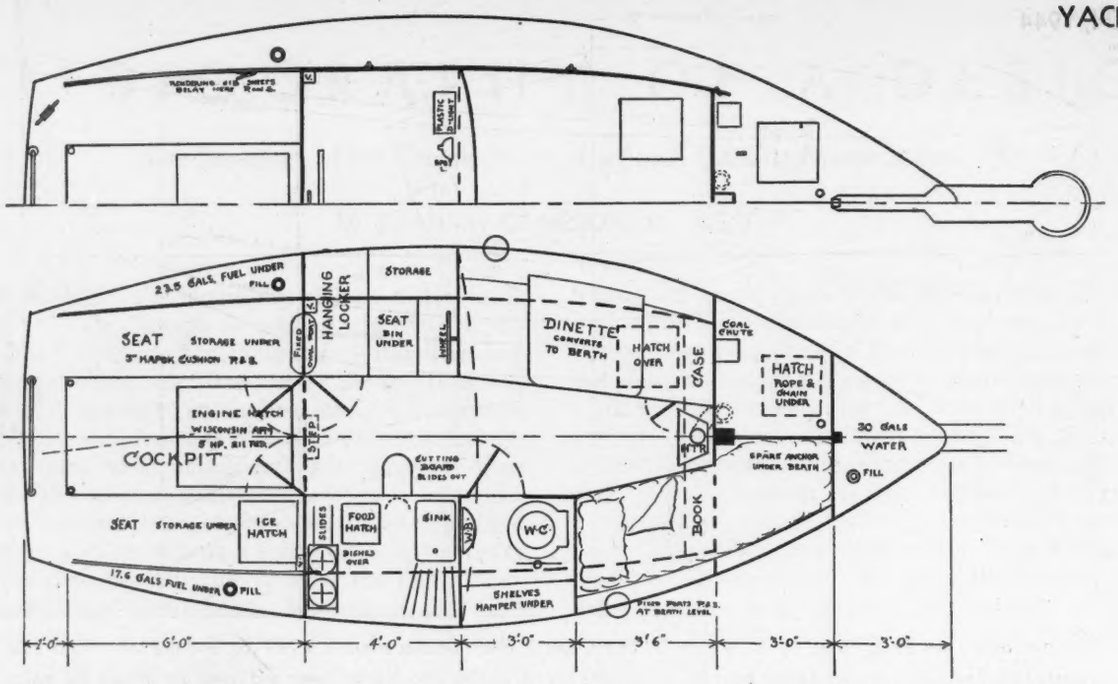
Thus, in January, 1942, I bought Howard Chapelle's *Yacht Designing and Planning*. This proved to be practically a complete education in itself. This volume deals particularly with cruising-craft, and bore out earlier opinions on the desirability of the gaff rig for cruisers. Among other helpful texts studied were Skene's *Elements of Yacht Design* and Chapelle's *Boatbuilding*.

Early in 1942, proud in our new-found knowledge, a set of one-inch-to-the-foot scale drawings was made for a twenty-foot hull. It was soon found that this design could be improved upon and a period of study of both published plans and textbooks was entered upon with renewed vigor. During the fall and early winter of 1942–43, a series of small scale plans, with body plans and lines for each was made. As the arrangement features were decided upon, the length and profile were altered, varying between nineteen and twenty-seven feet, to obtain the minimum length containing the accommodations wanted.

Finally, about one year after the study of design was commenced, all the ideas, plans, notes and dreams began to make sense and crystallized into a roomy little V-bottom, keel sloop, with a hull designed to be efficient under moderate sail or, up to about eight knots under power. She worked out to 23 feet, 6 inches over all, just under 20 on the water line, with a beam of 9 feet, 6 inches, and draft of 3 feet, 6 inches. This beam may seem excessive, but bear in mind that this boat was designed for comfort in living aboard, rather than speed, and is for use in protected waters only. For that matter, the famous old Friendship sloops of Maine had a beam-length ratio not too far different from this, and they were known on the whole Atlantic Coast for their weatherliness.

Our new craft's freeboard, too, is generous — 30 inches at the lowest point, over 3 feet at the bow; since windage forward is of secondary importance in a motor sailer, and this high freeboard forward gives a generous forepeak, with space for lots of spare gear and a large fresh water tank giving gravity feed to the galley. One bunk, on the starboard side, extends forward under this space for three feet, leaving more room in the cabin proper. These weights forward are balanced by the large fuel tanks and engine, both placed well aft, under the cockpit.

The cabin trunk is 10 feet long, the after 4 feet being raised about 18 inches to form a snug, well-lighted doghouse, while the forward portion is kept quite low. There is space a-top this forward section for a small, pram type dinghy to be stowed, inverted, on the starboard side, and handled by a tackle from the mast. The mast is stepped immediately forward of the cabin bulkhead which, being a continuous plywood section, from keel to cabin top and sheer to sheer, with the exception of one



The cabin trunk is 10' long, the after 4' being raised about 18" to form a snug, well-lighted doghouse, while the forward portion is kept quite low. The doghouse serves a dual purpose by giving full headroom in the galley on the starboard side, and by housing a sheltered steering position to port

small opening for the starboard bunk, provides unusual strength.

Turning to the interior arrangement, the doghouse serves a dual purpose by giving full headroom in the galley on the starboard side, and by housing sheltered steering position to port, with raised helmsman's seat and wheel, engine instruments and controls. Good vision ahead is obtained over the cabin trunk, as well as to the sides, through large Plexiglas windows fitted with automatic wipers. This position is intended for use only at night or in foul weather, when proceeding under power. Under this raised seat are the storage batteries and drawers for tools and parts, and the seat back itself folds forward and down to become a solid workbench, to which a heavy vise may be attached for general repair work and that puttering around with tools to which every real cruising man is addicted. This working surface is likewise a good chart table, being just inside the companionway from the cockpit. Between this helmsman's seat and the after cabin bulkhead, a space 18 by 30 inches by 5 feet in height, is a generous hanging locker for shore clothes.

To starboard, as one enters from the cockpit, the galley is nearly as commodious as the average newly-weds find in their first apartment. The working surface is about three by four feet in the clear. There will be a three-burner liquid fuel stove, with detachable oven, which will slide out on sail track from under the side deck when in use, leaving an insulated cubby-hole which serves as a warming closet for plates and hot dishes. The ice-box is of the club type with flush food hatch at the top, which will not spill out either precious cold air or more precious eggs and milk. The ice, up to 100 pounds, will be lowered into the ice compartment of this wonderful refrigerator via a large flush hatch on deck. We shall always carry our own ice tongs, and a small davit can be stepped near this hatch, so that the elusive cake may be handled in relative comfort from a bobbing dink alongside. What a welcome addition it would be to any small craft if an electric refrigeration unit operating on 6 or 12 volts, or a similar gas unit, could be operated at reasonable cost. Perhaps after the war such a machine can be procured.

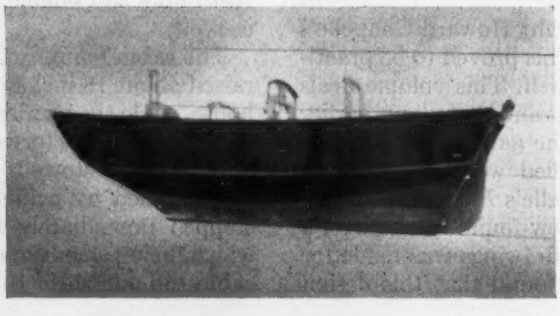
Forward of the galley, on the same side, is the toilet room, well insulated and ventilated, about 3 feet square, with 5-foot 6 headroom; this is all the space needed for the purely utilitarian purpose of its principal fixture.

The starboard bunk, or Skipper's Sack, will be nearly 7 feet long, extending from the forward toilet room bulkhead on ahead and through the forward cabin end for 3 feet into the forepeak. The Mate's berth is on the port side, in the form of a dinette, 6 by 3 feet.

Between the two berths, against the for'ard cabin bulkhead, room is provided for a small, open-front stove, burning either wood or coal, which should take the chill off the cabin in a cheery manner. This will have a flat top large enough for two "Tom and Jerry" mugs.

Outside, in the cockpit aft, the seats will be at deck level, for ease in building, and to permit good vision over the doghouse when at the tiller. To retain the feeling of being "in" the boat, however, there will be amply high coamings extending aft from the sides of the cabin trunk. These will provide back rests and protection for the cockpit seats, and canvas dodgers may be rigged in addition on both sides. Since these seats are over six feet in length, they can double as bunks, using air mattresses, and a tent over the boom, such as that suggested

(Continued on page 96)



From her drawings, a perfect scale model has been begun. When completed, and with correct ballast and accurately made sails and rigging, it should anticipate the performance of the full sized hull

MARCH, 1944

DESIGN FOR DINGHY SAILING

A Short History of the Dinghy Committee of the English YRA

By C. LESLIE LEWIS

IN GREAT BRITAIN, dinghy racing is controlled by the Dinghy Committee of the Yacht Racing Association, but this was not always the case and an account of how it came about may prove of interest. Up to about 1922, dinghy racing in England was mainly divided between the West of England, Cowes, the Thames, the Norfolk Broads, the Trent and the East Coast estuaries. In the West of England, they used 14′ dinghies and 18′ jolly boats, carvel built, fore and aft rigged with small jib and gunter lug and with heavy bronze center boards. They were capable little boats. The Norfolk Broads had a 14′ dinghy class of clinker built boats, carrying 140 square feet of sail, with a metal center board not exceeding 70 pounds. For some time, they stipulated that there was to be one sail, but this restriction was waived. The boats were good fun to race, but were not suitable for sea racing.

The Thames had for years a class of gigs which varied in size, rig and method of planking and raced under a rating rule of their own. The definition of a gig was "a boat built for sailing and rowing, with no side decks or waterways, and without outside ballast; the inside ballast, to be limited to two pounds for every five square feet of sail area." There were a few other restrictions, but the foregoing will give a rough idea of the type.

As far back as 1890, the Trent Valley Sailing Club had a 12′ dinghy class, the boats being sailed single handed and carrying 200 square feet of sail. They were high sided little tubs at first, carrying ballast but, in the end, this type was outclassed by unballasted boats and, in a strong wind, they would often run their bows under, pitchpole, and catapult their luckless skippers into the river. There seems to have been no restriction as to whether the boats were to be built clinker or carvel, and the class killer was naturally a carvel built cedar boat, which was kept in a bag ashore when the race was over.

Where every prospect pleases, and only a jibe is vile. 14′ International dinghies of the Trent Sailing Club showing their paces on the River Trent

An interesting old club book in the possession of the writer stated that . . . "frequent duckings proving that the sail carrying powers of the dinghies was being overstepped, a limit of 180 square feet was put on sail area." But even so, to quote from the book again . . . "The dinghy class, after providing good sport for seven years, had in its eighth year improved itself off the face of the waters." Which was hardly to be wondered at. Soon after 1918, the writer introduced the Broads type of 14-footer to the Club, but it did not survive long. In 1920, the Trent Sailing Club, lower down the river, took up the Broads type until the advent of the YRA 14′ dinghy. They have had a strong class of the latter (now the International 14′ dinghy) ever since.

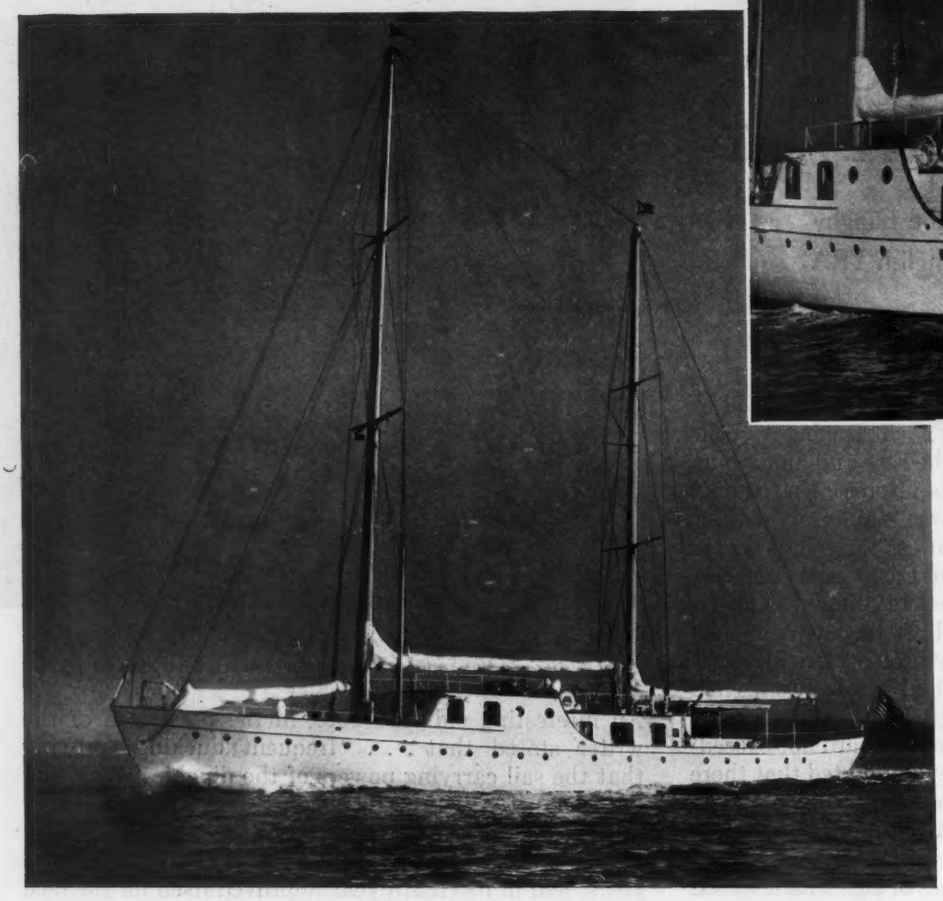
Taking an impartial view of all the dinghy classes, it can be fairly stated that the West of England Conference 14′ dinghy was the best but, both in the west and on the Broads, the time had arrived when it was desirable that something should be done to revive interest in dinghy sailing. A chance meeting between two individuals is sometimes the means of setting in motion a train of events which ultimately proves of benefit to the many, and so it was in this case.

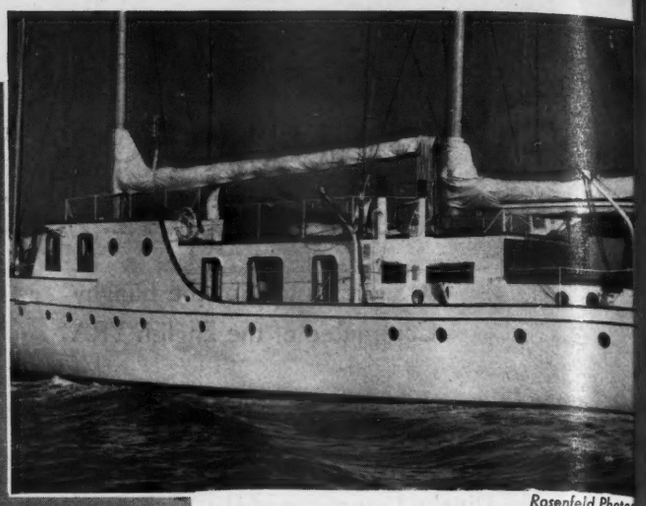
In June, 1922, the writer went up to the headquarters of the Upper Thames Sailing Club, at Bourne-End-on-Thames, to see the race for the Queen Victoria Challenge Cup competed for by the Raters. After this event, I went as crew in a brand new 14-footer, which I understood had been built to some restrictions which had recently been established by the YRA. It was obvious that the *Sissa II* had merits because, although we got a very bad start in a hard wind, we worked through the fleet and finished first or second, I forget which.

Then came a gathering at the Upper Thames S.C. and I found myself seated next to Major M. Heckstall-Smith. I must have been rather enthusiastic about *Sissa II* and her good qualities because my friend asked me to write an article for him about the new YRA rule.

(Continued on page 100)

Just before a dinghy race at the Royal Norfolk & Suffolk Yacht Club In the background are 12′ and 14′ dinks on "dry land" moorings





Rosenfeld Photos

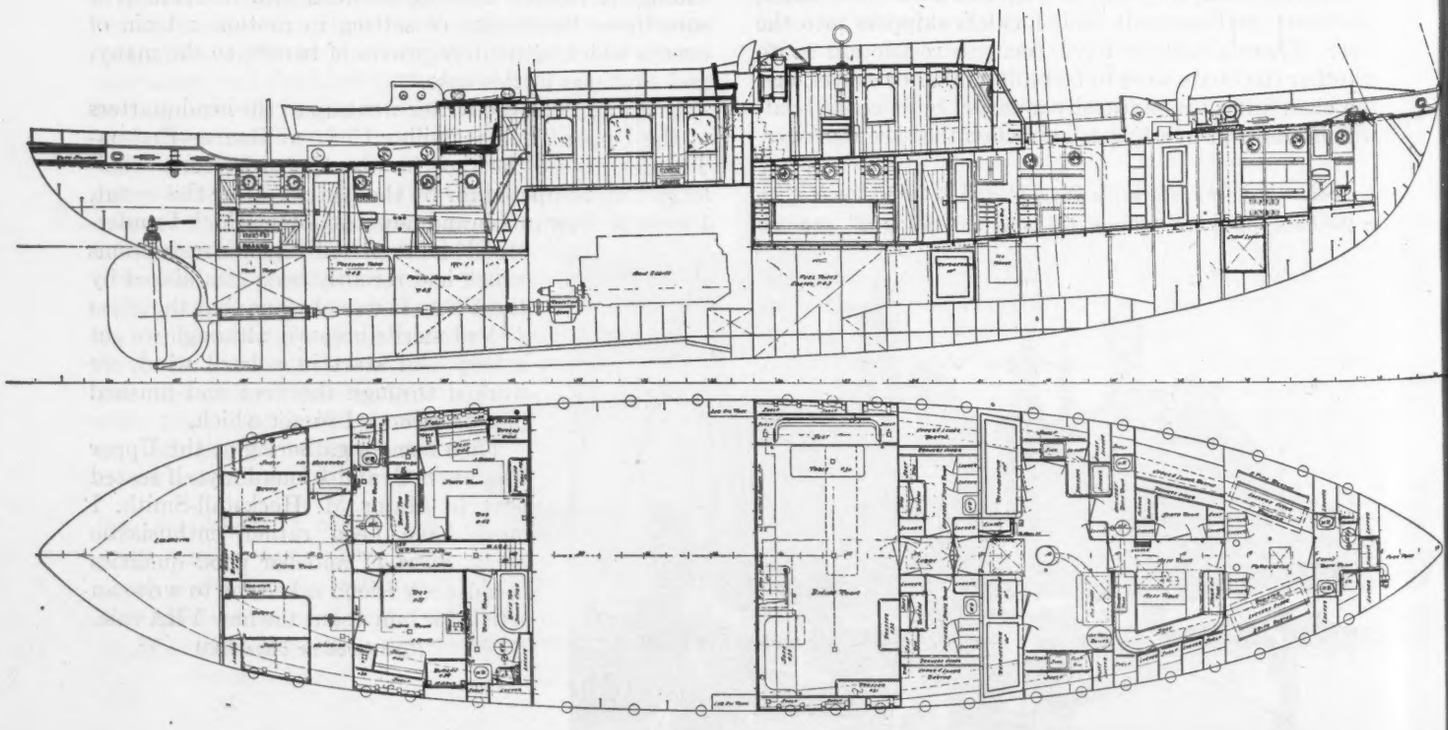
"Vagrant," latest in motor sailers. With a good sized rig of 4236 square feet, she is smart under sail and will do over twelve knots under power.

The midship deck houses shown above contain a large living room at the after end, extending the full width of the ship. Between this and the two staterooms for the owner at the forward end, each with bathroom attached, is a large chart room, with inside stairway leading from it to the navigating bridge above

"VAGRANT"

BUILT in 1941, just before the United States entered the war, *Vagrant* is not only the last motor sailer to be turned out in an American yard, but is also the largest. Designed by Sparkman & Stephens for Harold S. Vanderbilt, *Vagrant* was built by the Bath Iron Works. She is of steel, 117′ long over all; 101′ water line; 25′2″ beam, and 10′3″ draft. For power, she is equipped with a 6-cylinder Cooper Bessemer Diesel engine of 400 hp. at 900 r.p.m., which drives an Equi-Poise Tru-Pitch propeller. The accommodation plan below shows how well laid out and spacious are the living quarters for owner and crew. The engine room is fully sound insulated. With large tank capacity, the yacht has a wide cruising radius under power.

Shortly after the outbreak of the war, *Vagrant* was requisitioned by the Navy and is now in active service. Mr. Vanderbilt turned over the entire amount of the award to the Navy Relief Society.



With a bone in her teeth, "Mizpah" reels off the knots off her owner's home in Miami Beach, Florida. Equipped with many unusual electrical devices, including remote control steering, she is the last word in fishing boats

Below, lying alongside her owner's dock, the generous cockpit, with its fishing chairs, invites the beholder aboard for a day of exhilarating sport with rod and reel

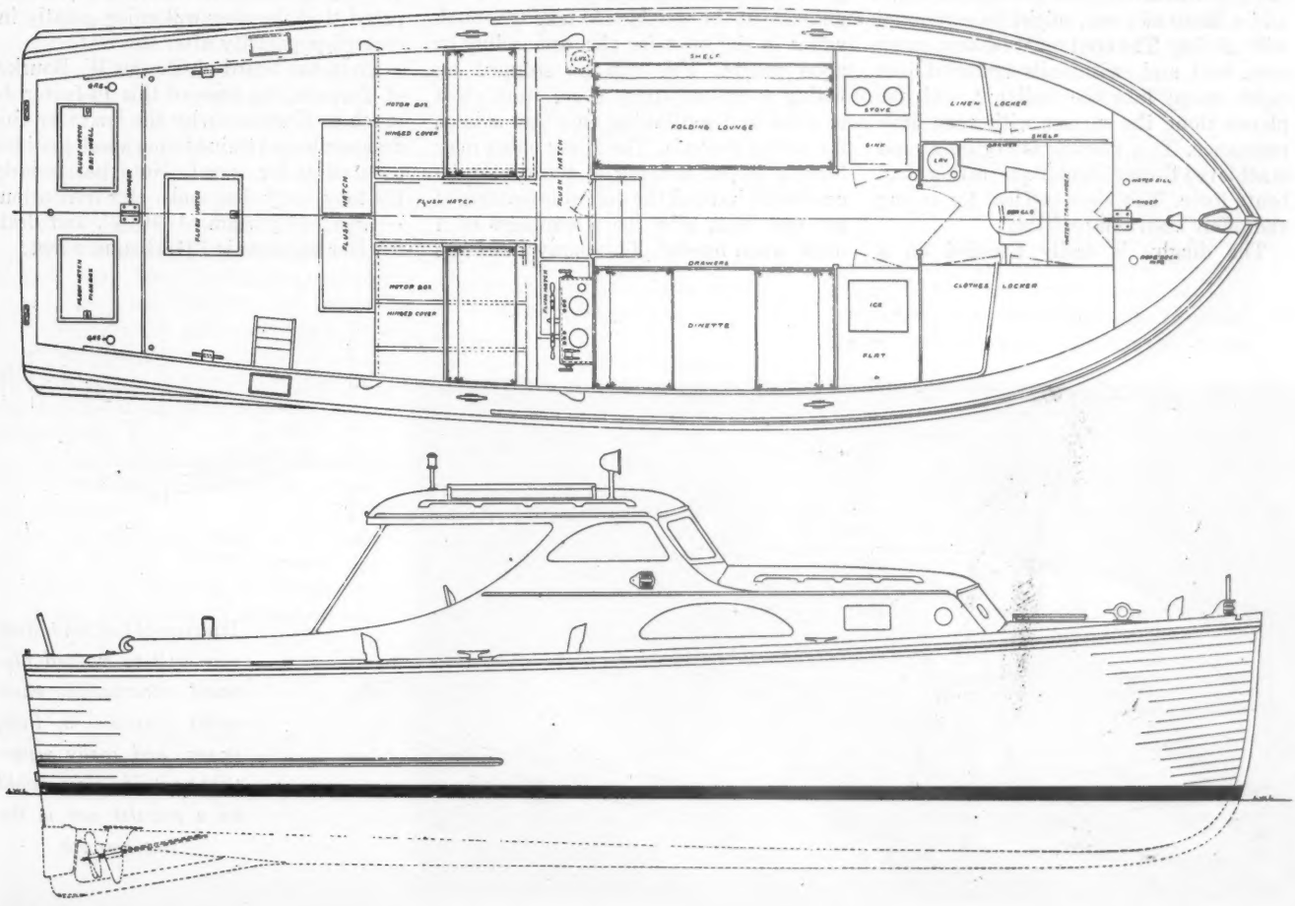
A FAST SPORTS FISHERMAN BY LYMAN

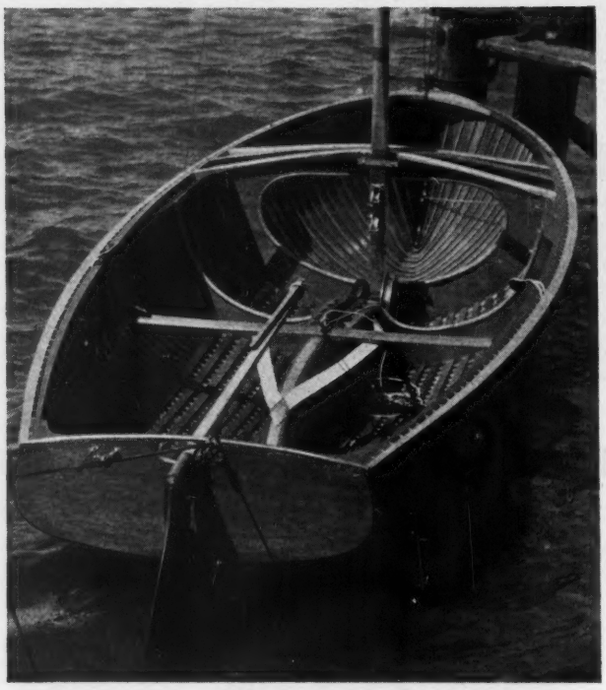
AMONG other unusual features of equipment, this handsome, clinker-built boat is fitted with an electric steering device that was worked out by her owner, Commander E. F. McDonald, Jr. Built by the Lyman Boat Works, of Sandusky, Ohio, and powered with twin 160 hp. Chris-Craft engines, she has been clocked at 30 m.p.h.

Named *Mizpah*, after Commander McDonald's 185′ Diesel yacht, now in government service, this able craft is used the year 'round by her owner, who takes her to Florida in the winter and uses her on the lakes in summer. In addition to her electric steering device, which permits remote control from the cockpit or through a 30′ cable which may be taken to any spot aboard, *Mizpah* is also equipped with the usual fishing chairs, fish box, live bait box and outriggers.

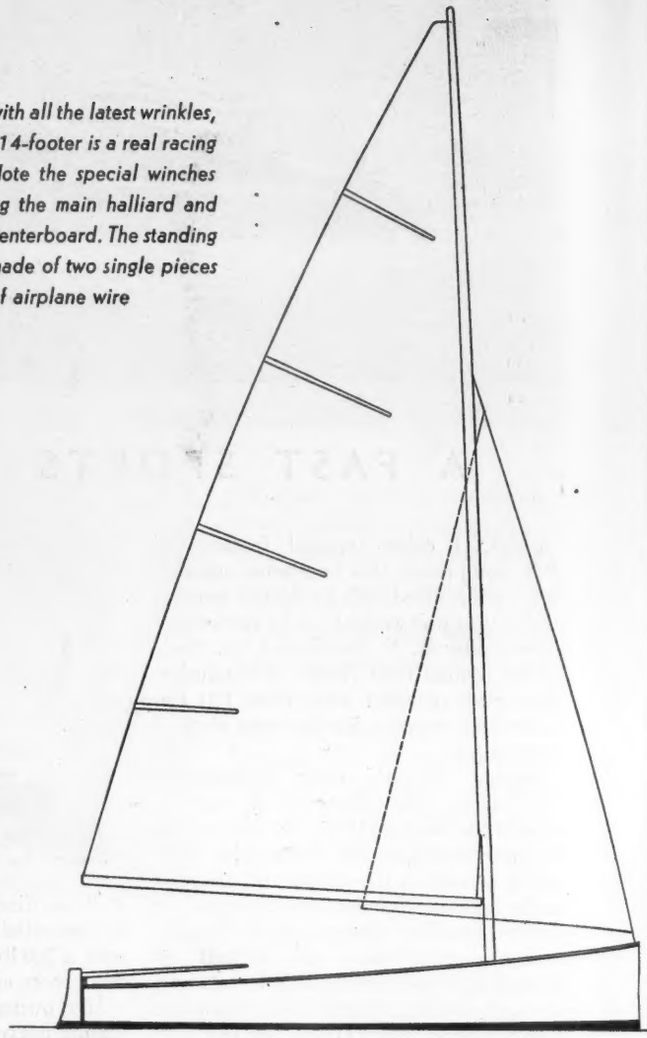
Cruising accommodations include a Pullman dinette to starboard, which may be converted to a double berth, a settee to port, a 300 lb. ice box, a small galley and a wash room and toilet forward.

Her owner says, "By means of the remote control unit, I can steer the boat with my feet while sitting in the fishing chair. When one button is pushed the wheel will turn to port until you take your foot off the button. The reverse occurs on the other button. A relay prevents danger from pressing both buttons at once. She is the greatest little boat I ever owned and I am having more fun with her than with the big *Mizpah*." Her dimensions are l.o.a., 32′ 4″; beam, 10′ 6″; draft, 2′ 8″.





Equipped with all the latest wrinkles, the Bourke 14-footer is a real racing machine. Note the special winches for handling the main halliard and the heavy centerboard. The standing rigging is made of two single pieces of airplane wire



SMALL BUT SPORTY

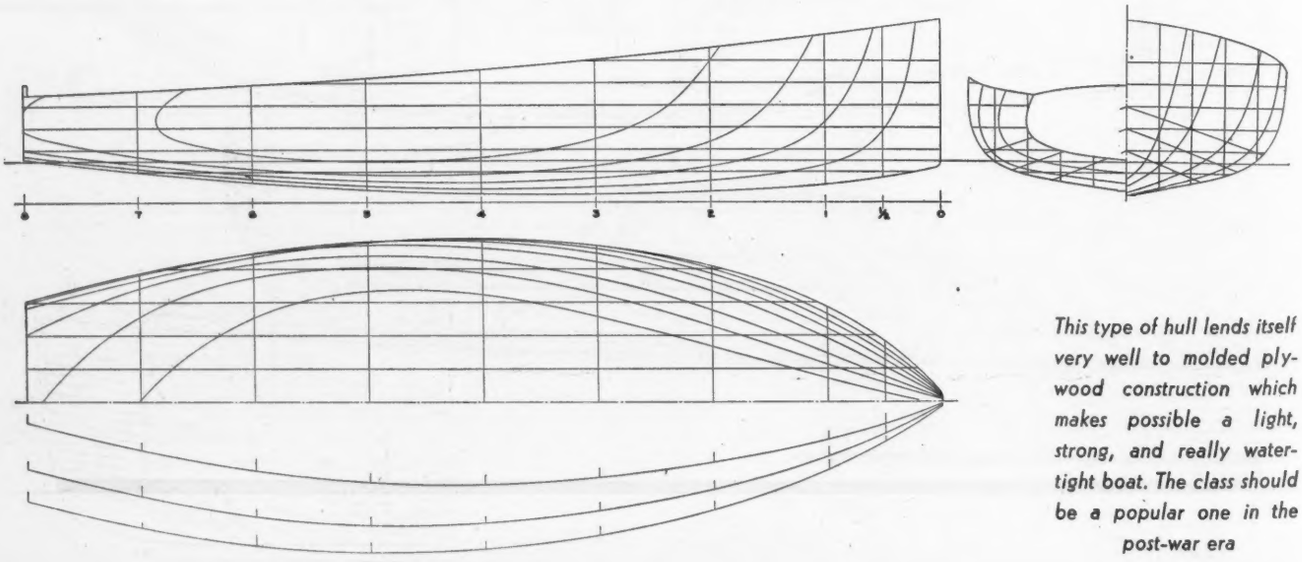
FOR good racing and the keenest of competition nothing, size for size, can touch the 14-foot International dinghy. This class is well established in this country, England and Canada.

Developed for speed, the 14-footer is just long enough and light enough to plane, and in a favorable sea and wind will keep up with much larger classes. Reaching, which becomes planing under ideal conditions, with wind a little aft and approximately 12 to 15 miles per hour, and a lump of a sea, might be compared with gliding. The boat must be kept on an even keel and, with sails trimmed just right, speed lifts the hull out and she planes along the surface with very little resistance. This planing is thrilling, and is achieved through technique, rather than brute force. The class is ideal for racing and offers keen competition.

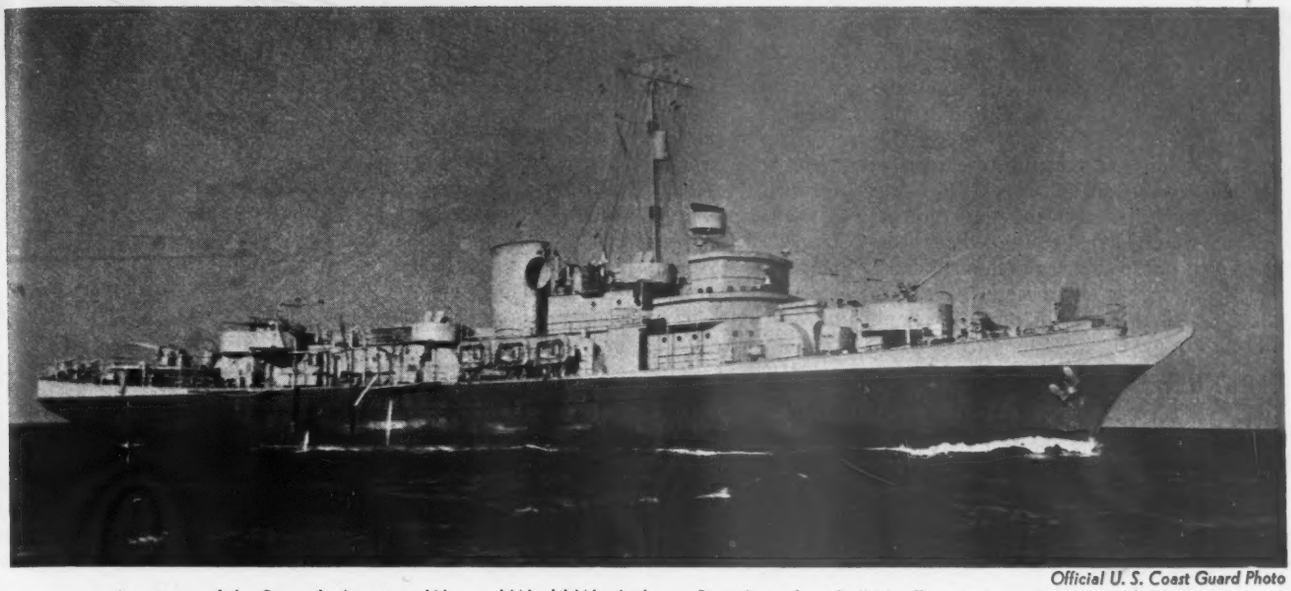
The dinghy is easily handled on a trailer; has been shipped via box car and boat to and from England and the continent; has been trucked across England from Liverpool to Lowestoft; has travelled from Toronto to Long Island and back in a moving van — all without a scratch!

The rules governing the class call for an open boat. In choppy water with a good breeze, enough spray curls over the gunwale at the shoulder to take too much water in the boat for pleasant sailing or good racing. This can be stopped by fitting a canvas spray sheet from stem to mast and continuing on either side as far as the shrouds. The spray sheet may have a zipper fastener in the center, so one would have all the desirable features of an open boat plus the advantages of a deck, when needed. This spray sheet has been advocated by sailors on both sides of the Atlantic — but the rules have not yet been amended to admit it. It is anticipated that the class will enjoy greatly increased popularity after the war.

From the board of Charles W. Bourke, of Toronto, the lines of this 14-footer do much to illustrate why the boats by this designer have attained such a well justified reputation for speed. Note particularly the long, easy diagonals. Her dimensions —l.o.a., 14′; beam, 4′ 10½″, and draft 6″. Her sail area is 124.63 square feet.



This type of hull lends itself very well to molded plywood construction which makes possible a light, strong, and really watertight boat. The class should be a popular one in the post-war era



Official U. S. Coast Guard Photo

A veteran of the Spanish-American War and World War I, the ex-Presidential yacht "Mayflower" is again on patrol duty. She is manned by the Coast Guard

THE MONTH IN YACHTING

POST-WAR WATERWAYS AND HARBORS

▶ George W. Codrington, president of the National Association of Engine and Boat Manufacturers, has called attention to the post-war public works program recently announced by the House Committee on Rivers and Harbors.

The committee's recommendations are embodied in a bill by Rep. Joseph J. Mansfield, of Texas. The first section authorizes the undertaking, not sooner than "six months after the termination of the present war," of a long list of projects for the construction and improvement of waterways and harbors throughout the United States and its possessions for which plans already have been made. The second part enumerates a large number of other works which the Secretary of War is directed to make the subject of preliminary survey with a view to their eventual inclusion in the authorized list.

"All of these are of potential benefit to boating," said Mr. Codrington, "but current interest lies most strongly in the new projects in the latter category. Of these, several are of particular significance to the prospective pleasure boat owner of the post-war period. If carried out these would provide:

"1. A continuous waterway between Portland, Me. and Boston, Mass., inland where possible.

"2. A through waterway of 12 feet depth and suitable width between the Ohio River and the Gulf of Mexico by way of the Tennessee, Tombigbee and Mobile Rivers.

"3. A waterway connecting Lake Superior and Lake Michigan from Au Train Lake to Little Bay de Noc, Michigan.

"4. A waterway from Lake Erie, at or near Toledo, Ohio, to the southerly end of Lake Michigan, by way of the Maumee River and the city of Fort Wayne, Ind., or other practicable route.

"5. Improvement of the Champlain Canal, New York.

"6. Survey of the coast of southern California with a view to the establishment of harbors for light-draft vessels.

"These are only a few of the larger projects contemplated by the Congressional proposal, but they are indicative of the promise of vastly increased facilities which the future holds for boating."

Mr. Codrington cited also the recent statement of Major General Thomas M. Robbins, assistant chief of Army Engineers, that his department has plans for complete development of the Mahoning Valley in Ohio that will include the long-awaited Lake Erie-Ohio River Canal. When this canal is built another important link will have been added to the network of inland waterways of post-war America.

YACHT CLUB ELECTIONS

▶ Flag officers and committee chairmen of The Vermilion B.C., Vermilion, Ohio which were recently elected for the 1944 season are: Commodore, Gordon Douglass; vice commodore, Arch. H. Stevenson; rear commodore, Don H. Warner; secretary-treasurer, Arch. H. Stevenson; fleet captain, Robert Root; fleet surgeon, John Pinkney; I.L.Y.A. delegate, A. F. Wakefield; chairman, race committee, Arch. H. Stevenson; chairman, regatta committee, Leroy Grant; publicity director, Leonard K. Osberg. The club is now making plans for the South Shore Regatta, which will be held August 12th and 13th. The second annual race for the Commodore Brown trophy will be held on August 10th.

▶ The Twentieth Annual General Meeting of the Point Claire Y.C., Point Claire, Que., was held in Montreal on February 7th. At that time the following officers were elected for the 1944 season: Commodore, L. H. Place; vice commodore, F. A. Hamlet; rear commodore, R. E. Hardwick; secretary, K. B. Thomson; treas-

A 45-foot Navy picket boat built by the Peyton Co. Kent Hitchcock Photo

urer, E. J. Winters; harbor master, L. A. Watters; and the following committeemen, A. Fee, R. K. Morrison, F. H. Smith, A. H. Thomson. The report of this aggressive club is interesting by reason of the fact that in the spring of 1943 it was all but washed away, and the resultant damage would have discouraged a less determined group of yachtsmen. Today, despite manpower and material shortages, the Club plant is all but repaired — and all bills are paid.

EARLY NEW JERSEY SHIPBUILDERS

▶ In these days of modern shipbuilding, most people overlook the fact that early Americans didn't let the size of a stream worry them when they wanted to build sea-going craft. One of the best proofs of that comes from Dennisville, N. J., where "Captain" Ogden Gandy took pride in telling the world a boat could be built high up on land and eventually launched, if you just had the patience.

Cap'n Gandy said he used to help his father build schooners, big ones, too, up to 1000 tons. Dennisville is, as he said, six miles from Delaware Bay as the crow flies, ten miles away down the Dennis Creek. "Why did you build those ships so far from the shore?" was a natural question. "Well," came the answer, "the wood was here, it wasn't down to the shore. We had to build ships where the wood was, in those days. Anyhow, tides were uncertain. You might get a ship half finished down there and then have it carried away by the tide."

Some of the largest schooners running were built around Dennisville in those days, up to the 1880's anyway, in the same routine. Ships would be completed, launched sideways when the tide in the creek was right and then inched down the creek according to the tide. They were moved with every tide, and often the progress would be only a few feet in a day. Sometimes, Cap'n Gandy said, it took six months to get a big ship down to the Bay — but of course, he always added, those were the exceptions. "Usually it only took a couple of months."

SAN FRANCISCO YACHTSMEN PLANNING ACTIVE SEASON

▶ Reports from the west coast state that San Francisco yachtsmen are planning an unusually active 1944 season, with definite indications that there will be even more doing than there was last year. "There has been," writes our correspondent, "the directive cutting power boat gas allowances down to an almost irreducible minimum, but this has, on the other hand, greatly stimulated sailboat enthusiasm. It has also created much interest in small racing classes.

"Another interesting transition is either renewed or newly-developed personal interest of members in their yacht clubs. Many are taking an active interest not only within the business circles of the clubs, but also in the social activities where, for lack of help, members are either procuring or producing entertainment on their own initiative. It is really, for the time being, a return to the so-called 'good old days.'"

It won't be long now!

BARNEGAT BAY Y.R.A.

▶ The twenty-ninth racing season of the Barnegat Bay Yacht Racing Association concluded with the Annual Meeting at which officers were re-elected for the coming year. They are: commodore, Victor L. King, of Lavalette; vice-commodore, Ludwig C. Lewis, of Mantoloking; treasurer, Dr. Herbert W. Nafey, of Lavalette; secretary, Rowland Hazard, of Bay Head.

While not a part of the Barnegat Bay Yacht Racing Association activities, the National Championship of the National Lightning Association was held over the courses of the Bay Head Yacht Club, one of the Association member clubs. A general committee, with Mr. John W. Orelup, Captain of the Barnegat Bay Lightning Squadron as chairman, looked after the entertainment and accommodations of the visiting skippers and crews. The operation of the series of three races was in the hands of the Bay Head Yacht Club Regatta Committee, Rear Commodore Rowland Hazard, Chairman, assisted by Vice Commodore L. C. Lewis, of the B.B. Y.R.A.

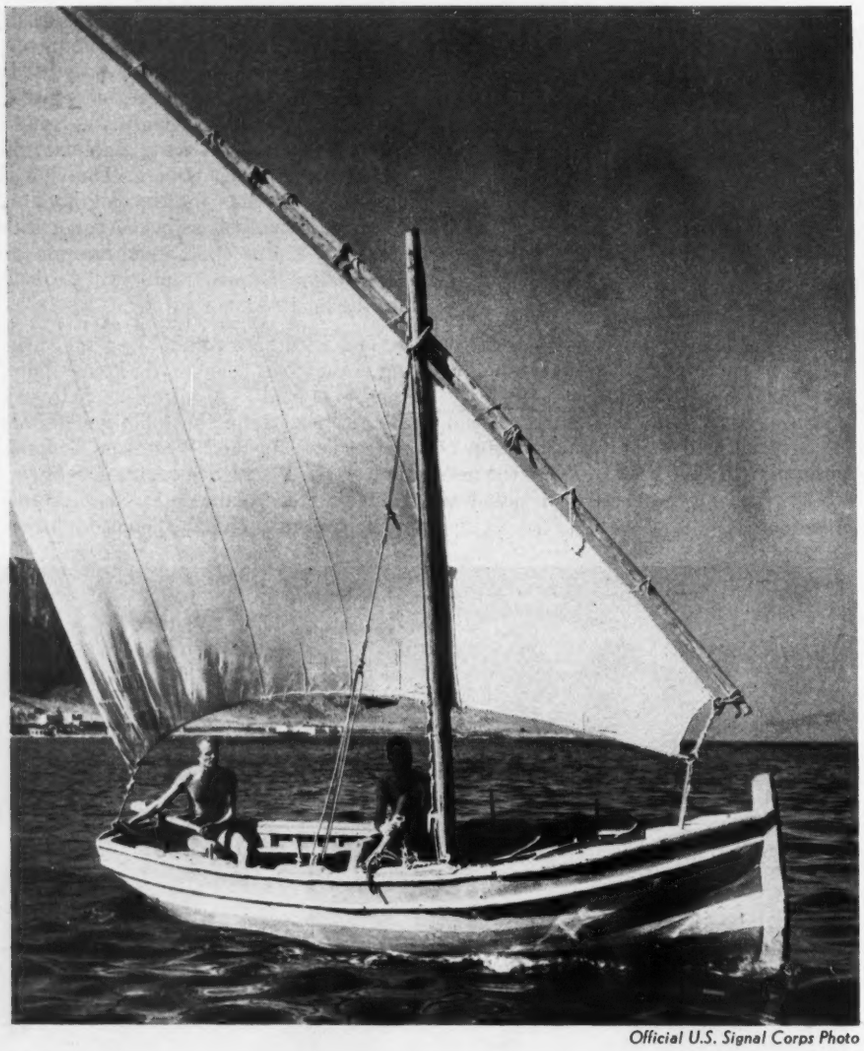
OFF SEASON YACHTING

When boats come up in winter,
And summer sailing's done,
The time for winter yachting
Is the start of lots of fun.

The topsides must be sanded,
The masts be taken out,
The cabin will be painted
And ideas changed about.

The time for winter yachting
Begins when nights are cold,
And plans for summer yachting
Start to form and to unfold.

VIRGINIA ALVA SMITH



Official U.S. Signal Corps Photo

Once a sailor, always a sailor! Two American veterans of the Sicilian invasion take an afternoon sail in a local fishing craft

THE PERFECT GUEST

▶ Here are some citations of those perfect guests, shipmates, crew, or whatever you want to call those people that you can't inveigle onto your boat half as often as you'd like:

— The fellow who comes to get a "good rest" . . . but quietly manages to do about twenty-five odd jobs a day.

— The fellow who's on YACHTING's list of America's ten best sailors . . . but who doesn't run the boat until he's asked to.

— The girl who doesn't use the fresh water on a long cruise as though she thought your tank was piped to the Kensico Reservoir.

— The fellow who's never been on a boat before . . . but who knows what a mop, chamois, broom, and brass polish are for.

— The crack helmsman who goes into the galley, and turns out a fine meal, just for the fun of it!

— The fellow who is up to his waist in water on the end of the bowsprit . . . before you've finished asking him to get in the jib.

— The old-timer who's been tired and soaking wet for three days on a Bermuda race . . . yet wants to douse the jib and set the genoa.

— The fellow who gets seasick . . . but who doesn't let a little thing like reverse peristalsis keep him from taking his trick at the wheel.

— The girl who finds out the right way to work the plumbing.

— The fellow who spends as much time to help fit out your boat in the spring as he spent in her last summer.

— The fellow who can work miracles with a "North Sea piano" or can spin a yarn to a capacity audience . . . yet who leaves the boat with as much of a reputation for his sailing as for his entertaining.

— The watch-officer who can drive the pants off the crew . . . yet leave them thinking they're in a game rather than in the Navy.

— The fellow who shows up on a small boat with a sea-bag rather than a bulky suitcase . . . yet always has the right clothes.

WILLIAM J. GRIFFIN, JR.

Swedish International Press Bureau

M/S "Albatross", a new Swedish merchant marine training ship. She is 207' o.a. and has a sail area of 9270 sq. ft. The ship is used to train deck and engineering officers

"SEMPER APPARATUS"

▶ Readers of Lieut. Rufus "Bud" Smith's graphic account of the formation and operation of the Coast Guard's sailing patrol (page 27 of this issue) might wonder how the morale of his doughty crews stands up under fair weather and foul. From long observation it can be said that there is no more enthusiastic group in the Service, and their good cheer and *esprit de corps* is often revealed in the somewhat informal observations which accompany their logs.

The following report, from an unnamed CBM, is a case in point. It notes the "uneventful" character of one patrol:

— Rudder broke.
— Sails blew out.
— Engine conked.
— Two fires in after cabin.
— Fire in engine room.
— Generator broke down.
— Radio broke down and caught fire.
— Topping-lift broke.
— Leak in water tank.
— Leak in decks.
— After cabin stove blew up.
— Storm trysail and storm staysail blew out.
— Foot rope on bowsprit broke.
— Boom tackle on pennant broke.
— Cringle on trysail broke.

N.B. Outside of above, nothing happened. "Semper Apparatus."

NAVAL OFFICER PROCUREMENT

▶ With a large number of additional sea billets for officers opened up by the great increase in vessels of the U. S. Fleet, the Office of Naval Officer Procurement, 33 Pine Street, New York 5, N. Y., has announced that applications will be accepted from college graduates up to 38 years of age. College graduates who are not performing work essential to the war effort and can meet the physical requirements for general sea duty are desired. Minimum eye requirements are 15–20 vision in each eye corrected to 20–20.

REGATTA CIRCUIT RIDERS' MEMBERS HONORED

▶ Each member of the Regatta Circuit Riders' Club on duty with the armed forces will be honored by a special award from the club, according to announcement by Commodore Fred Brown, of Red Bank, N. J. This special recognition, the form of which has not been definitely determined, was voted at the recent 21st annual meeting in New York of the Commodores' Committee, governing body of the club, which is composed of leaders in the field of recreational boating. Officers of RC2 also were reëlected as follows: Mr. Brown, commodore; Roy S. Foyle, Annapolis, Md., vice commodore; Jack Maypole, Chicago, Ill., rear commodore, and Ira Hand, New York, secretary-treasurer.

CALENDAR

Inter-Collegiate Y.R.A.

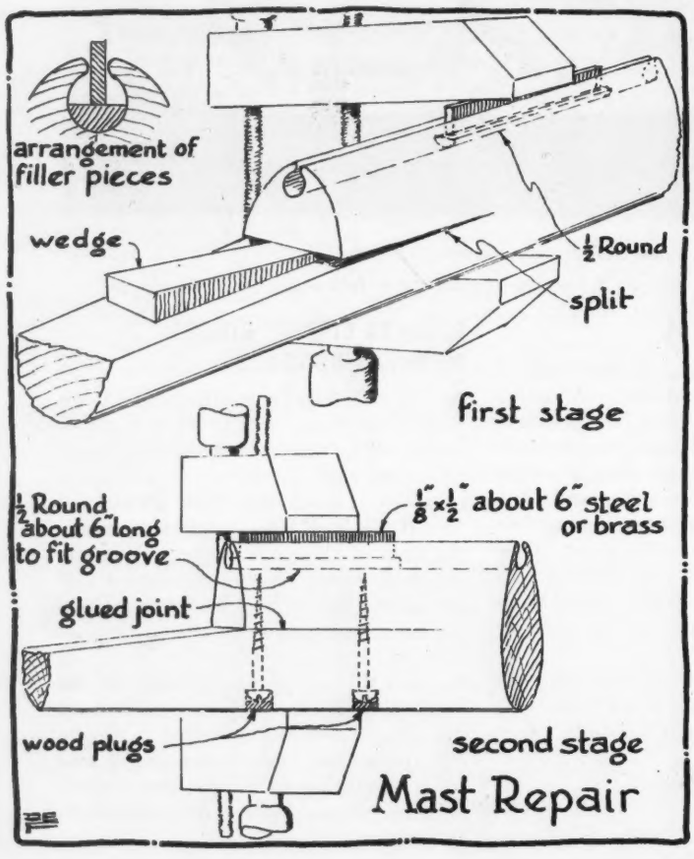
Tentative Spring Schedule, 1944

April 9 — 7th Greater Boston Dinghy Championships for Rudolf O. Oberg Trophy at Northeastern University Y.C.
April 9 — Dual Meet, Coast Guard versus Yale at the U. S. Coast Guard Academy B.C.
April 16 — 9th Annual Spring Invitation Regatta for Lucien Sharpe Memorial Trophy at Brown University Y.C.
April 22–23 — 4th Inter-Collegiate Y.R.A. Eastern Championship for the George Owen Trophy at the U. S. Coast Guard Academy B.C.
April 23 — 11th Semi-Annual New England Associate Member Championship for I.C.Y.R.A. Trophy at M.I.T. Nautical Assn.
April 30 — 14th Boston Dinghy Club Intercollegiate Challenge Cup (Open) Regatta at the M.I.T. Nautical Association.
May 6–7 — 4th Annual Inter-Collegiate Y.R.A. New England Championship for U. S. Coast Guard Academy. Alumni Association Bowl at the U. S. Coast Guard Academy B.C.
May 6–7 — 4th Annual Inter-Collegiate Y.R.A. Middle Atlantic Championship for The America Trophy at the Navy A.A.
May 13–14 — 3rd Annual Coast Guard–Naval Academy Dual Meet at the U. S. Coast Guard Academy B. C.
May 20–21 — 8th Annual Inter-Collegiate Y.R.A. National Dinghy Championship for the Henry A. Morss Memorial Trophy at the Nautical Association of M.I.T.
May 27–28 — Dual Meet Round-Robin; Coast Guard versus M.I.T.; Harvard versus Yale; winners versus winners; losers versus losers at the U. S. Coast Guard Academy B.C.
June 3–4, 10–11 — Reserved for McMillan Cup preliminaries (tentative) at the Coast Guard and Naval Academies.

"GADGETS & GILHICKIES"

Fish Pole Mast Repair

▶ In the March issue, I told you of a method of repairing an over wide slot in a dinghy mast. This month, I am going to move up the mast to the joint. This is one of the weakest points in such a mast and one that frequently gives trouble. Owing to the great strain put upon the joint when running off the wind, splits (as shown in the sketch) frequently occur at this point, and a number of ways of repairing them have been developed.



The two holes for the long screws should be drilled and plug holes bored before any other work is commenced. Everdur screws would be most suitable, if they can be bought. Otherwise steel will do. They must be as long as possible and yet not penetrate into the groove. Size No. 12 or No. 14 is about right in diameter. Their heads should be covered with white pine plugs set in marine glue and sanded smooth with the surface of the spar. The screws are not to be inserted until after the crack has been spread with the wedge and the glue applied.

In using this scheme, it is important not to allow the spar to split any further when the wedge is inserted. By putting a piece of ½ round, which corresponds with the diameter of the groove, into the latter at a point just beyond the end of the split and inserting a piece of ⅛" by ½" metal strip through the slot, as shown, the whole may be clamped with a parallel clamp. This effectually prevents any further splitting.

Using a hard wood wedge, spread the split until it is about 1/16" wide; then, using a palette knife or any other very thin applicator, work plenty of "Weldwood" waterproof glue into the crack. Be careful to mix the glue in accordance with the instructions on the box, otherwise you will fail to get the benefit of its full strength. Next remove the wedge. Insert the screws and tighten them up as much as you can, leaving the plugs until later. Now loosen the clamp and move the filler pieces until they come over the glued joint and reclamp, using all the pressure you can command. Allow to set for at least twenty-four hours.

After the glue has set, remove the clamp and the filler pieces, insert the pine plugs over the screw heads, using Jeffery's or Kuhl's aviation quality marine glue, or Weldwood glue, to be sure that no water will penetrate the spar and possibly start rot. If properly done this repair should be stronger than the original spar.

Sheet Metal Nosings

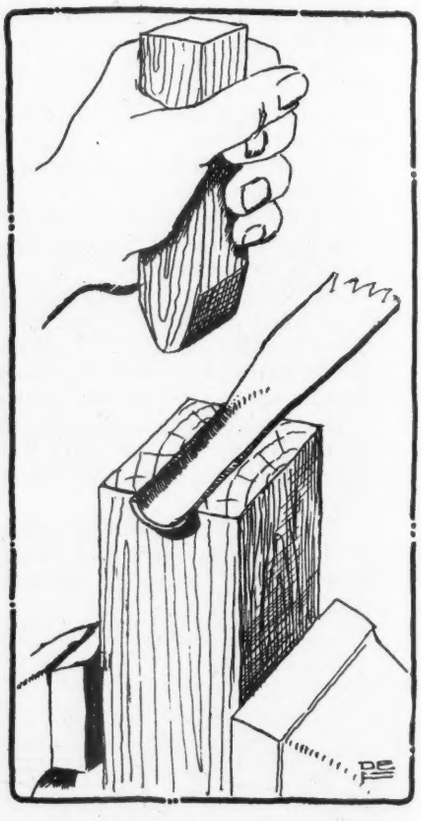
▶ In these days, when it is so difficult to get the materials you may need to do a job, it is sometimes handy to know more than one way to do a thing. Recently I needed some half round brass to cap a mahogany transom for protection from wear and tear. I was unable to get hold of any so decided to try making it from strip brass, and the results were quite satisfactory.

The first thing to do is to make a couple of cardboard templets of the form the nosing is to fit — one male and the other female. The latter should be smaller than the former by the thickness of the metal you plan to use. Using a hard wood like maple, oak or birch, take a piece a little thicker than the width of the nosing you propose to make and about six or eight inches long by about three inches wide. Across the end of this piece gouge a groove which agrees closely with the form of the male template. Be sure that the *end* of the block is used, otherwise the results will not be satisfactory. This forms the die.

The punch is made from a similar piece of hard wood about six inches long and with a section of about ¾" by 1½". The end of this punch should be shaped with chisel and rasp to agree with the female template. This piece also should have the grain running lengthwise.

The most satisfactory way to hold the die is in a heavy vise, as it has to stand a bit of pounding. If no such vise is available, perhaps it would be better to make the die piece long enough to reach to the floor, so that the weight of the blows will be taken there. A piece of two by three would be good enough if only a short piece of nosing is to be made. Being of soft wood a two by four would not stand much pounding before the groove lost shape.

Hold the punch in your left hand, as shown, and with a fairly heavy hammer proceed to pound out the shape, while a helper feeds the strip brass across the die. A little practice will soon make you adept.

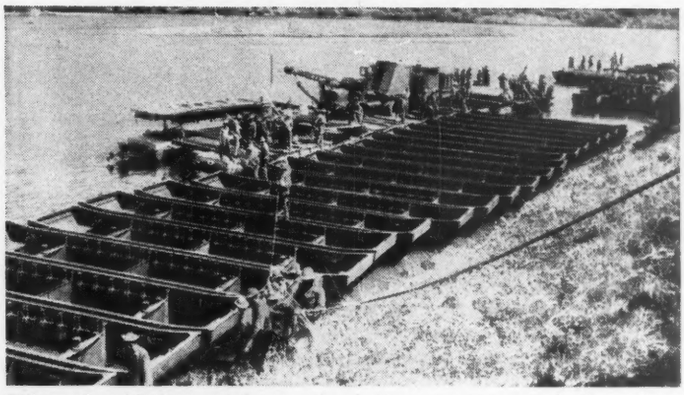


Be sure that the brass with which you are working is soft. If it is not, you can anneal it by heating it to a dull red. It may be cooled in water to save time, without danger of its hardening. This type of punch and die are suitable for brass up to perhaps .050" thick.

If buffed to a nice polish and secured with oval head screws, countersunk, this nosing will serve a long time.

HAM DE FONTAINE

Both HAVE AN AFFINITY FOR HARD WORK...



When the Alaskan Highway was built, engineers used Champion-equipped outboards to push rafts of standard pontoons from Edmonton to within 100 miles of the Arctic Circle.

Gun crews board an inflated rubber raft—powered by a Champion-equipped outboard—to cross the Pee Dee River in Army Field Maneuvers in the Carolinas.

During 3rd Army Maneuvers in Louisiana, Champion-equipped outboards help the 88th Engineer Battalion construct a heavy pontoon bridge over the Calleassieu River.

Photos by U. S. Army Signal Corps

Champion Spark Plugs and outboard motors in the service of our armed forces are performing prodigies of hard work.

From a utilitarian standpoint the outboard motor is the only answer in many situations where the need for dependable, portable marine power is vital to the transportation of military personnel and matériel.

Quick starting and dependable ignition under any and all operating conditions are absolutely essential in military operation of outboards. Outboards equipped with Champion Spark Plugs have been a winning combination for many years past, and we are indeed proud that today more Champion Spark Plugs are in service in outboards than any other make.

CHAMPION SPARK PLUGS

ARMY E NAVY

LET'S ALL BACK THE ATTACK — BUY WAR BONDS

Under the Lee of the Longboat.

by Spun Yarn

DIFFERENT sailors have different methods of counting. Some prefer the slow, measured, half second count of "*and* one, *and* two, *and* three, *and* four," etc.; while I myself generally favor the "O two three four, one two three four, two two three four, three two three four, four two three four" system. It makes little difference how you do it so long as the seconds are counted with reasonable accuracy. Which preface brings me to the tale of the minesweeper that was about to drop depth charges during its structural firing tests. There had been reason to suspect that the firing circuit that slides one ash can after another over the stern was faulty, and the aged coxswain who was stationed at the depth charge racks was told that if the first charge wasn't released electrically he was to count "One thousand and one, one thousand and two," and when he pronounced the word "two" was to pull a lever and drop the charge manually. So the firing circuit didn't work and the coxswain didn't release the charge manually. There was a long delay which merged tensely into a longer delay. The telephone talker on the bridge couldn't find out what the trouble was and, after a still longer delay, the gunnery officer ran aft to make a personal inspection. And there on the fantail he found the ancient coxswain counting earnestly, "Two hundred and sixteen, two hundred and seventeen." God knows what would have happened if he had been told to count "No chimpanzees, one chimpanzee, two chimpanzees."

There's an Air Station near Dismal Spit, whose name I withhold for security reasons and also because I don't want to get my neck broke, which borrowed one of our crash boats and returned it after a fortnight's use with the remark that there seemed to be excessive vibration in the port motor. Dry-docking revealed that they had worn the port propeller down to the hub. The stub of one of the blades was a little longer than the other two, which condition, no doubt, produced the vibration. . . . Just now, the same Air Station has sent over a compass for adjustment. It was removed from the binnacle and dispatched by station wagon for a hurry-up job!

I know of a Naval Section Base farther away from here that is located in territory so dry that a sailor can't buy a glass of beer. And I know that a group of sailors at this base did what sailors often do in such cases, drained the alky off the red shellac, and drank it. Sure, they should have known better. Maybe they would have if the W.C.T.U.ers hadn't convinced a lot of communities that beer is as deadly as wood alcohol. Anyway, two of the poor lads died. When the commander of the task group in which they had served asked for a report of the circumstances he received a radio dispatch that ran like this: "Your 301416 x Denatured alcohol drinking x Dizzy x Dazed x Drunk x Delirious x Dead x Damned shame x Doc." For it seems that the medical officer was pinch hitting that day for the communication officer and related the fatal consequences of the sailors' folly in the heartless language of the clinic.

Speaking of "communicators," who are an abused, hard-working lot, I'd like to record a couple of facial expressions peculiar to them. One is "The I lost a confidential publication look" and the other is "The I wonder if I've drawn the proper recognition signals look." The difference between these looks is principally one of color, a pallid gray for the second and a ghastly green for the first. If you still don't recognize the facial expression I'm trying to describe, did you ever run a ship on a reef in broad daylight with a dry lead line — or did you ever fire a three-inch gun without looking to see whether it had returned to battery?

When I read some weeks ago in a newspaper obituary an unintended slur on the good name of my cutter *Hotspur* (which is alive and flourishing, thank you), I was willing to let it pass. You don't find authentic yachting news in newspapers. But when I read in January YACHTING the following ignorant repetition of this canard by "Starboard Tack," I really riz up and hit the ceiling. And I'm still up there. "Starboard Tack" erroneously stated ". . . the well-known *Narwhal*, which, in 1931,

(Continued on page 106)

BATTLE HONORS
of the Champ!

Midget fighters whip opponents 50 times their size!

Wherever action is hottest you'll find PT boats in the thick of it.

Whipping ten to fifty times their weight. Dashing in to the kill. Unleashing a lethal sting that no enemy ship can stand. PT boats are the scourge of the skulking Axis navy.

Designed for fast work, these hard-hitting egg shells, driven by thousands of horsepower, have made headline news ever since Nazi hordes went on the prowl. For fast, sure footwork PT's are equipped with Equi-Poise Propellers!

First used on the famed Miss America X of speed boat days, then on the Scott-Paine MTB, the Elco, Huckins and Higgins PT and Vosper Victory . . . Equi-Poise has won new laurels for delivering extra speed with dependability.

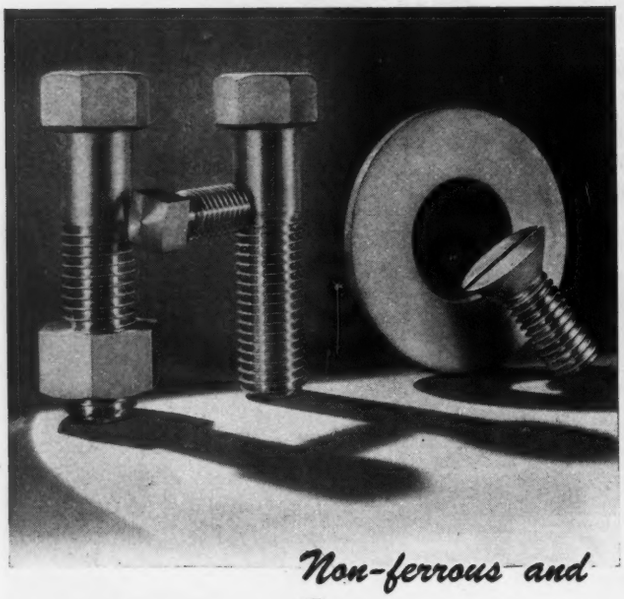
Today we're working 'round the clock making propellers from 8 in. to 12 ft.—also related equipment for boats of the Allied Navies. Tomorrow, when "men sail for fun again," new techniques of precision manufacture will result in finer postwar products. Federal-Mogul Marine, 4043 Beaufait Ave., Detroit 7, Michigan.

LST—Landing Ship, Tank. Designed by the Navy to land heavy equipment on enemy shores. Federal-Mogul Propellers help to "push them through."

The coveted Army Navy "E" awarded Federal-Mogul Marine Division (Detroit plant) for high contribution to American freedom.

ARMY E NAVY

FEDERAL Mogul



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Headquarters

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To serve fastening users, Harper stocks over 4280 different items . . . employs a large staff of engineers and field service men . . . and offers a vast fund of practical non-ferrous and stainless fastening "Know how." Sample this "Know how" by writing (on your letterhead) for a four-color, 84 page catalog.

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HARPER
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What Our Readers Say

The unusual frame shapes of a bulbous bowed fisherman

Editor, YACHTING:

▶ I am enclosing a photograph of a boat being built up at Tenants Harbor in Maine about ten years ago. It was built by the late Philip L. Smith, whose amateur endeavors in building this boat led him into the enthusiastic path of securing the Snow Shipyard, where he built many good vessels — particularly for the war effort.

This effort of his earlier days is amusing. It was prompted by stories he had read of the great improvements resulting from using bulbous bows on warships, etc. which he incorporated on the 36-foot fishing boat which this picture shows practically half-planked. It was a Herculean effort to plank this craft, as you can see by the extraordinary frame shapes, and, to make it harder, the bottom was planked with oak. I never heard that the boat was outstanding in performance, but he did accomplish one thing, and that was he got space for a toilet practically against the stem head, and maybe that justified all the hard work.

A. E. LUDERS

Stamford, Conn.

ROYAL OCEAN RACING CLUB

Editor, YACHTING:

▶ I went abroad last summer on a special mission in connection with my work as a member of the Executive Committee of the USO. I spent several weeks in London and, while there, the Royal Ocean Racing Club sent me an honorary membership.

The Club, while bombed out of its previous headquarters, is well established in a beautiful old house on St. James Place, and it's a very popular Mecca for the many men both in and out of the service who happen to be in London. A very genial spirit permeates the establishment. You are likely to see any one of the members waiting on the bar, from the First Lord of the Admiralty down. Of course, the greater part of their membership is in the service but there are still some of the older men, who are called on by the Government from time to time if they want a ship moved from one British port to another and they do not have an adequate crew to do so. There is no difficulty about enrolling such an aggregation.

One evening a young lady (as you know, they are included in their membership) came in looking for a crew to race a dingy with her on the Thames the following Sunday and she was overwhelmed with applicants, including a commodore and a couple of four-stripers.

Burnham Porter, who has been on active duty with the British Navy for some years and has now been transferred to ours, is on duty in London and can be found at the Club almost any evening.

Most of their cruising yachts are on the ways waiting for the end of the present unpleasantness. Their Government does not make use of them as the Coast Guard does here, because of their susceptibility to airplane attack.

WALTER ROTHSCHILD

Brooklyn, N. Y.

Best equipped attacking army the world has ever seen . .

Higgins boats and boats of Higgins design . . now in action in every theatre of war . . are helping fulfill the President's promise to the American people . . the best possible equipment for the Army, Navy and Marine Corps

ARMY E NAVY

Higgins

INDUSTRIES INCORPORATED

NEW ORLEANS

HUB OF THE AMERICAS

WORLD'S LARGEST BUILDERS OF BOATS

ORIGINATORS AND PATENTEES OF THE HIGGINS EUREKA LANDING BOATS

For Freedom's Sake . . BUY BONDS!

SEND FOR THIS BOOK

"NAVIGATION WRINKLES FOR COMBAT MOTOR BOATS"

108 pages, illustrated, of useful information on piloting and navigating based on lectures given in Higgins Boat Operators and Marine Engine Maintenance School. One section of book contains information that previously sold for $25. Book will be sent to you postpaid, at cost of printing, binding and mailing..... **$1**

Built for the job

When the Canadians planned the Ramped Cargo Lighter, a *functional* boat if you ever saw one, they didn't have to look far for a *right* engine. They wanted a powerful unit, dependable, one of proved ability. They found it in the heavy-duty Gray Model Six-121 gasoline engine.

This capable engine was already doing a great job in heavy stock Cruisers built prior to the war, in big Chesapeake Bay Oyster Schooners, in South American Work Boats, and in Deep Sea Fishing Boats on the long haul from Southeastern Alaska. It was that kind of engine.

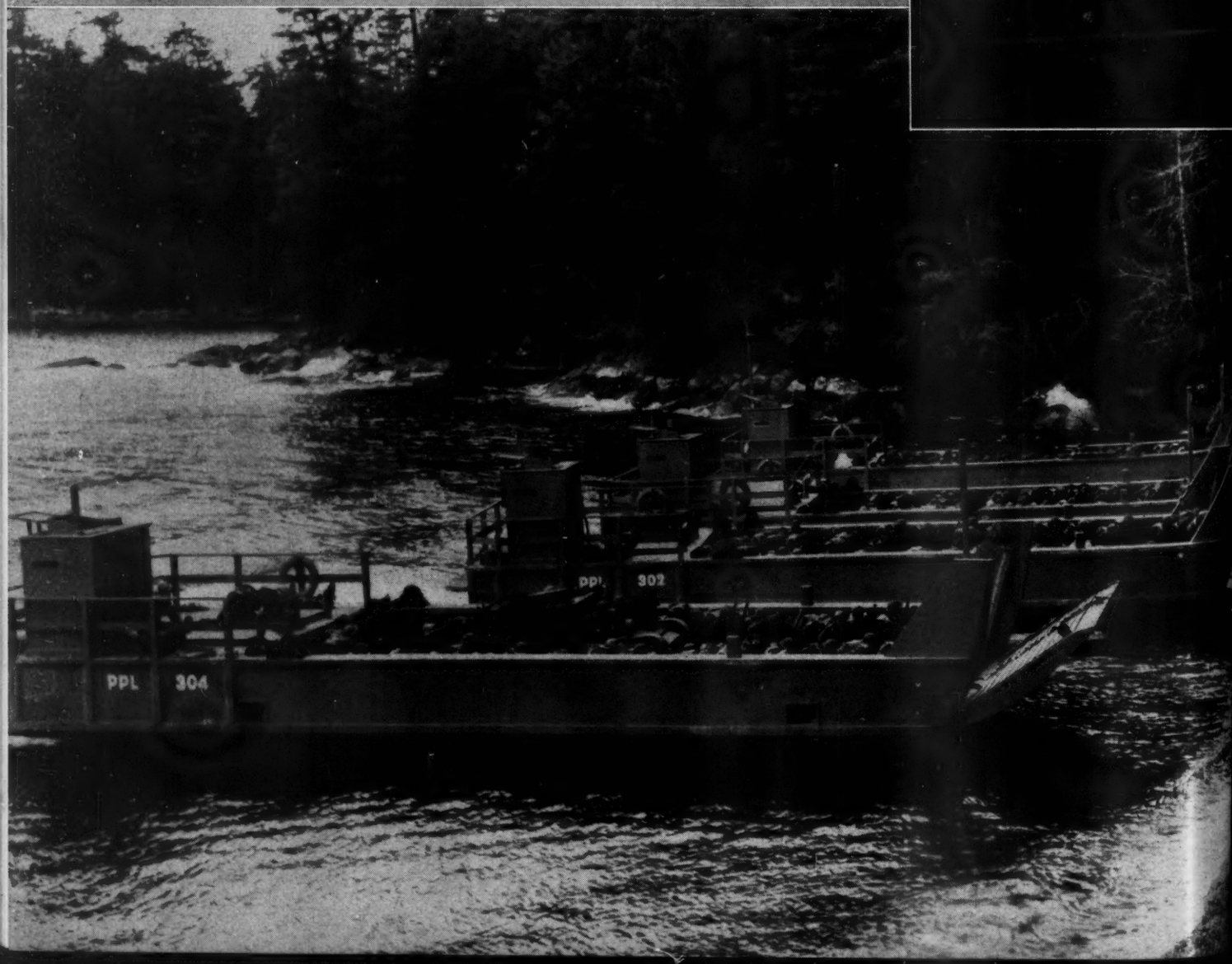
Here again, the ample range of models in the Gray Line provides an engine built for marine work, of the correct size and of the proper operating characteristics to fit the boat. A special modification of the Gray Six-121, to specifications of the Department of Munitions and Supply at Ottawa, has smooth power for the job at hand.

Gasoline or Diesel, there is a standard Gray Marine Engine to fit your boat, without compromise. If you are planning now on a new engine or a new boat, you will want a copy of the Gray Data Book. Regardless of what engine you use, we will be glad to send you a Gray Operators' Handbook.

Send for List of Gray Catalogs and Instruction Manuals

GRAY MARINE MOTOR COMPANY

DETROIT 7, MICHIGAN



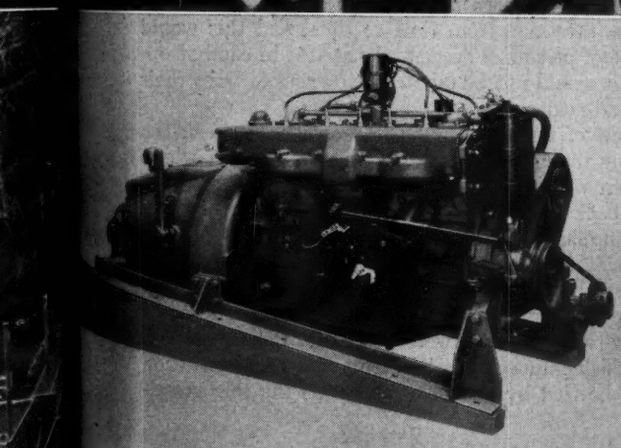
...at Hand...

This "Ramped Cargo Lighter," designed under supervision of construction engineers of the Royal Canadian Navy and the British Ministry of War Transport, is a good example of Canadian resourcefulness. Built of plywood to save time and critical metals, and possessing certain advantages over steel construction, the craft itself uses materials produced in Canada. It is designed to carry ordnance and men, as well as to do general lighterage work. Watertight compartments in the hull construction enable these boats to take a great deal of punishment without losing buoyancy; prefabricated in sections which can be easily shipped anywhere and assembled at the scene of operations.

Built in Canada by

Dominion Construction Company, Vancouver, B. C.
Foundation Maritime Company, Bridgewater, N. S.
Howard Furnace & Foundry Company, Toronto, Ont.
West Coast Salvage & Contracting Co., Vancouver, B. C.

GRAY MARINE MOTORS GASOLINE DIESEL



Massive, powerful, as good as it looks, the 7-bearing Gray Model Six-121 combines a surprising wallop with remarkable quietness and smoothness. Its ample piston displacement is the clue to its capacity for handling heavy loads without loss of revolutions. The engine as shown here has special mountings adapted to Landing Boat installation

Here's another interesting application of Graymarine gasoline engines with reduction gears, in a peace time job. This 65-foot "shovel nose" Power Scow is operated by one of the big Alaskan canneries on Bristol Bay. Capacity, 120 tons of iced salmon. Note how it resembles an Invasion Barge.

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HER INVISIBLE CREW

BY BUYING MORE WAR BONDS NOW

The first crew of this fighting ship has no age limit — requires no "physical" — is open to YOU. For YOU will be the man behind her guns — and on thousands like her — through your purchase of War Bonds and More Bonds . . . It's a long, long way to Tokio and Berlin. So let's all keep on Backing the Attack, "standing watch" toward a better tomorrow.

YOUR SHIP OF TOMORROW IS ON TRUSCOTT BOARDS TODAY

We Invite Inquiries from Responsible Distributors

TRUSCOTT BOATS

TRUSCOTT BOAT & DOCK CO.

ST. JOSEPH · MICHIGAN

WITH THE U. S. COAST GUARD AUXILIARY

▶ During the past six months there has been a vast amount of discussion, official and otherwise, regarding the question of the time and method of turning back Reserve boats to their owners by the Coast Guard. Now, from headquarters in Washington, comes official word on the subject.

Having accomplished their mission, the two thousand boats which have made up the Coast Guard's Reserve fleet are gradually being returned to their owners. These small craft were pressed into service at the outset of the war, and played a very important part in the defense of America's coasts against any infiltration of enemy raiders or saboteurs. They were also of determining importance when the enemy's forces threatened our shores to a much more likely degree than at present.

Due to the critical shortage of certain vital materials, the Coast Guard has been forced to modify its original provision that these boats would be returned to their owners in the same condition as when received. The Reserve Act of 1939 and the regulations of the Coast Guard Auxiliary, under which provisions the craft were enlisted in the service of the Coast Guard, stipulated that only fair wear and tear should be counted in determining the extent of restoring the boats to their former condition. But the material shortage, coupled with the lack of skilled manpower and the congested conditions in shipyards, led Headquarters to the decision that the owners would be better served if the boats were returned unrepaired with a fair cash settlement in lieu of repairs. The great majority of boat owners, who are themselves keenly aware of the difficulties involved in attempting any restoration program under wartime conditions, have been in substantial agreement with this decision.

One of the few objections raised has been that the Coast Guard might as well keep the craft until the end of the war — and then repair them. Coast Guard Headquarters points out that this alternative was considered but that it would involve more than merely laying up the boat. A laid-up boat would have to receive attention from time to time, and this would involve the use of personnel desperately needed in combat operations. And it would not be fair to the owners to have their craft laid up and neglected.

Another point of interest to the boat owner has been the method used by the Coast Guard in fixing the amount which the Government will pay instead of the repairs. The standard of values goes back to the early days of the war when the Government was purchasing boats from private owners, and the actual purchasing was being done by many people inexperienced in the small boat field. Different agencies were consequently paying a different scale of prices, and in several cases several highly divergent prices were offered for the same craft. To eliminate this confusion, the War Shipping Administration was finally authorized by the Government as the sole vessel-

Official U.S. Coast Guard Photo

Flotilla Two, Division One (Ninth District), participating in invasion tactics in coöperation with the Navy ROTC of the University of Minnesota

"Flat-Top" drawn for Churchward by Gordon Grant

"Flat-top" ...file and don't forget!

There's a great lesson in how Uncle Sam has developed the "flat-top", and used it in this war.

In fact, there's a great lesson in many war-born developments. Take welding . . . ! It's no exaggeration to say welding science has pushed ahead 10 years in the past two. More and more products are being welded *for greater strength, metal-saving, lighter weight, faster production.*

We have learned and are learning a great deal about the versatility and adaptability of welding to many products in our busy war shop.

Much of the new skill and know-how we have acquired will be put to good use—on some interesting new developments—when that great day of Peace dawns.

A LARGER PRINT of Gordon Grant's picture used in this advertisement, suitable for framing, is available to you with our compliments. Please write for yours early as the supply is limited.

CHURCHWARD & CO. • 37 WATER STREET • WEST HAVEN, CONN.

Today's visions... ARE TAKING SHAPE
ONE thing sure about tomorrow's boats . . . they'll be roomier, faster, sturdier and more seaworthy than their predecessors. They'll be more graceful in appearance . . . and more comfortable all around. Building ships for Uncle Sam has taught us all a lot — Traditional limitations of design have been overthrown, old practices revised and a vast fund of boat building knowledge acquired. Already, our engineers and designers are looking forward to the day when they can apply this knowledge and craftsmanship to peacetime boats for leaders destined to shape our future. Make your plans now by writing our custom design dept.
STURGEON BAY
SHIPBUILDING & DRY DOCK COMPANY • STURGEON BAY • WISCONSIN

purchasing agency. The WSA set up an appraisal committee, made up of experts, which determined a fair market price for any vessel under consideration. This price was more specifically defined as what the average willing buyer would pay the average willing seller. Roughly half of the vessels under a thousand tons purchased by this Committee were taken for Coast Guard use.

In order to avoid conflicting scales of values on returning the craft, now that the need for them is over, the Coast Guard has adhered to WSA standards of values in determining the amounts to be paid in lieu of repairs. This is particularly important in cases where the amount approaches what the outright purchase price would have been. In other words, it is patently unsound for the Government to pay, for example, $30,000 for repairs when the outright purchase price would have been $25,000. Another factor involved in the decision to use WSA standards was that the latter agency insures all Coast Guard reserve craft and will have occasion to make settlements with many owners.

Boat owners will be especially interested, perhaps, in the typical procedure employed by the Coast Guard in the actual determining of the amount of cash settlements. The following is the procedure of one District, and those of other Districts approximate it in a general way:

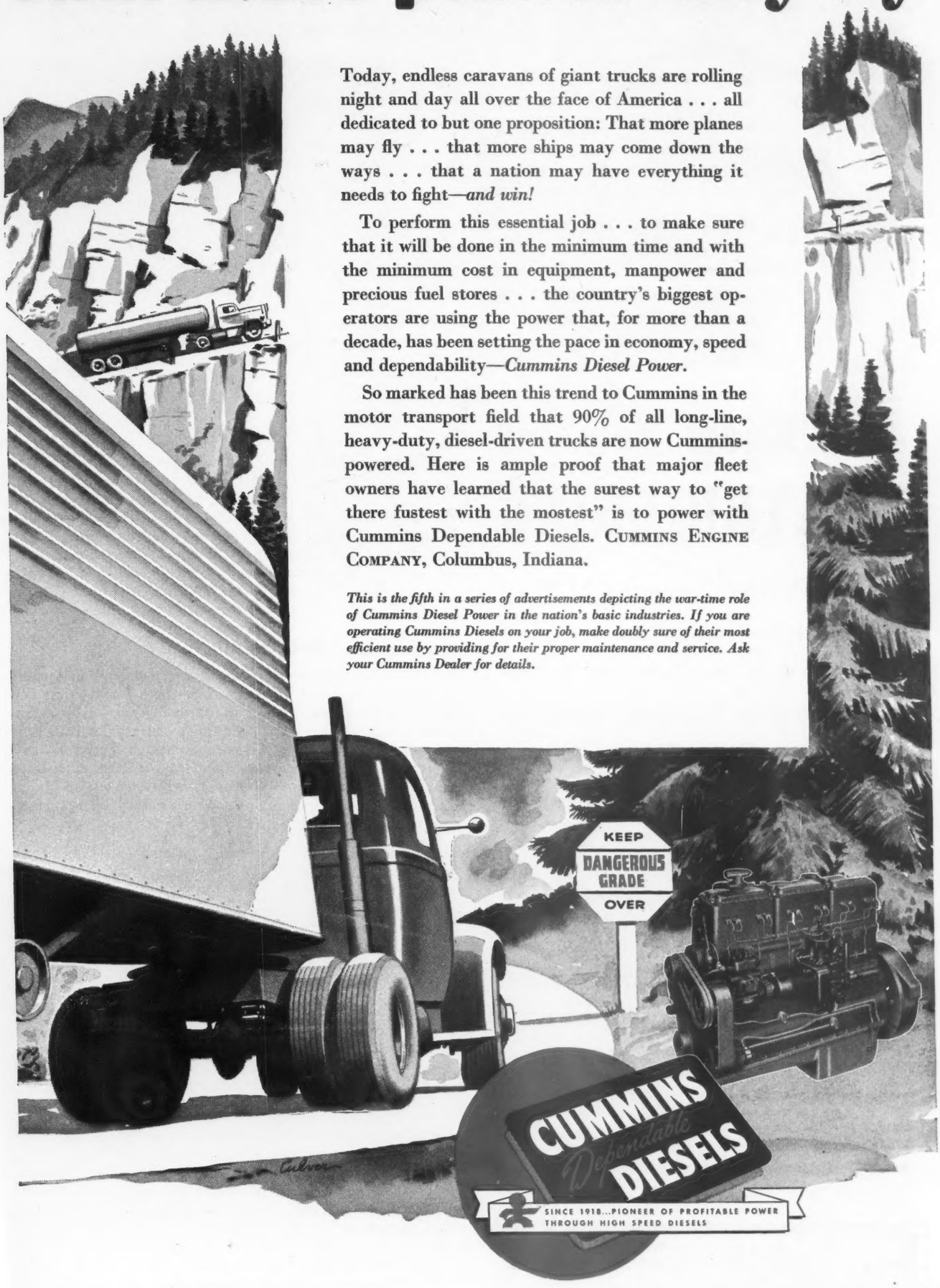
When a boat is marked for return to its owner, a three-man committee immediately sets out to make a careful survey of the vessel. The committee is composed of a former boat builder and shipyard owner, an expert on marine engines, and a former yachtsman who has been associated with boats all his life and who has frequently paid for repairs on his own craft. The latter is also a member of the Reserve Vessel Board, the agency that discusses the settlement with the owner. The committee then prepares a detailed report on the extent of repairs necessary to restore the craft to the condition it was in when taken over by the Service. The owner is then informed that the Coast Guard proposes to return his boat to any reasonable spot that he may designate and that a survey of the necessary repairs has been made. The owner then accepts the return of his boat (it is pointed out that such acceptance does not prejudice his claim in any way), makes his own survey and estimate of repair costs and submits his claim. When he does so, he is invited to discuss this figure with the Board in a personal meeting, where they make a joint endeavor to work out a reasonable figure. In no case is a settlement made with finality unless the owner has had the opportunity to discuss the amount of adjustment with the Board. If he is absent, his acceptance of the craft does not preclude such discussion, for he can meet with the Board at some later date.

Of the thousand or more craft that have already been returned to their owners, less than one per cent have involved their owners in any protracted discussions beyond the initial meeting with the Board. This is significant not only of the traditional accord that has always existed between boat owners and the Coast Guard but also of the patriotic spirit of the owners. True to the fraternity of the sea, they have rendered help when it was necessary and where it was needed. Now that need has been modified, such craft are reverting to their owners. The majority of the latter have accepted them back with the same generous spirit with which they offered them originally.

Of the remaining boats still enrolled in the Coast Guard Reserve, numbering approximately a thousand, an average of two per cent every month will be returned to their owners. The order of their return is dependent upon their current usefulness to the Service. Those which are of the least immediate value from a purely operational point of view will be returned first, but eventually the entire Reserve fleet will have been demobilized.

The demobilization of the Coast Guard Reserve fleet marks an important point in the history of yachting and motorboating in America. It proves the vital usefulness to which a hobby can be put in time of need. And it indicates that American boatowners have a very deep sense of their obligations to the national welfare. "The pleasure craft of peace time," said Admiral Waesche, "tided over a gap which was causing serious concern."

That more planes may fly



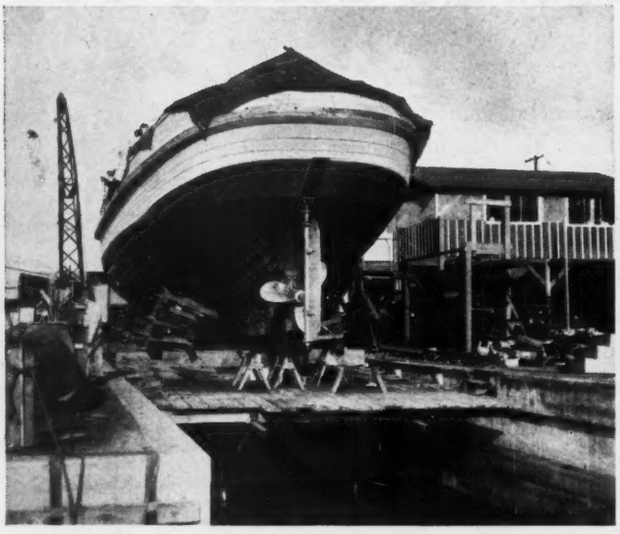
Today, endless caravans of giant trucks are rolling night and day all over the face of America . . . all dedicated to but one proposition: That more planes may fly . . . that more ships may come down the ways . . . that a nation may have everything it needs to fight—*and win!*

To perform this essential job . . . to make sure that it will be done in the minimum time and with the minimum cost in equipment, manpower and precious fuel stores . . . the country's biggest operators are using the power that, for more than a decade, has been setting the pace in economy, speed and dependability—*Cummins Diesel Power.*

So marked has been this trend to Cummins in the motor transport field that 90% of all long-line, heavy-duty, diesel-driven trucks are now Cummins-powered. Here is ample proof that major fleet owners have learned that the surest way to "get there fustest with the mostest" is to power with Cummins Dependable Diesels. CUMMINS ENGINE COMPANY, Columbus, Indiana.

This is the fifth in a series of advertisements depicting the war-time role of Cummins Diesel Power in the nation's basic industries. If you are operating Cummins Diesels on your job, make doubly sure of their most efficient use by providing for their proper maintenance and service. Ask your Cummins Dealer for details.

Experience . . . . . .



the "Know How" of BOATBUILDING

★ The Peyton Company of Newport Beach, California, has the necessary "know how" of building valuable fighting craft for Uncle Sam. Your War Bond purchases are helping to provide these boats.

★ Tomorrow, these same War Bonds will buy pleasure craft for you. Select The Peyton Company to build your after the war boat. . . . Write us now if you are interested.

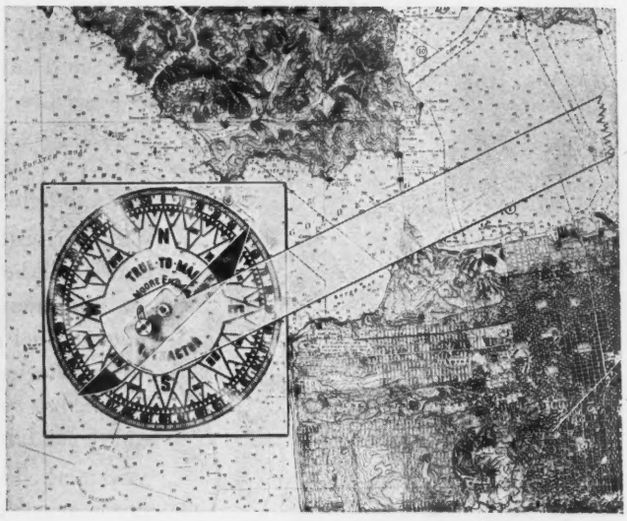
We welcome all who are interested in post-war boats, both for pleasure and commercial uses.

THE PEYTON COMPANY
BOAT BUILDERS ★ NEWPORT BEACH, CALIFORNIA

WATERFRONT NEWS

By "BEACHCOMBER"

TRUE-TO-MAG PROTRACTOR



▶ Made of a tough transparent plastic and weighing only six ounces, this protractor may easily be stored in your chart case. Its operation is simple: a small pointer is put on "magnetic" north and a long, or "true" arm is swung to agree with the variation in the area in which you are sailing. This adjustment is locked with a thumb nut. By putting the "true" arm on the course to be sailed and lining up the compass rose with the nearest meridian, the magnetic course is easily read. The Moore Engineering Co., 701 Corbett Bldg.; Portland 4, Oregon. Also for sale by YACHTING Book Department. Price, $3.50.

INGENIOUS INSTRUCTION AIDS

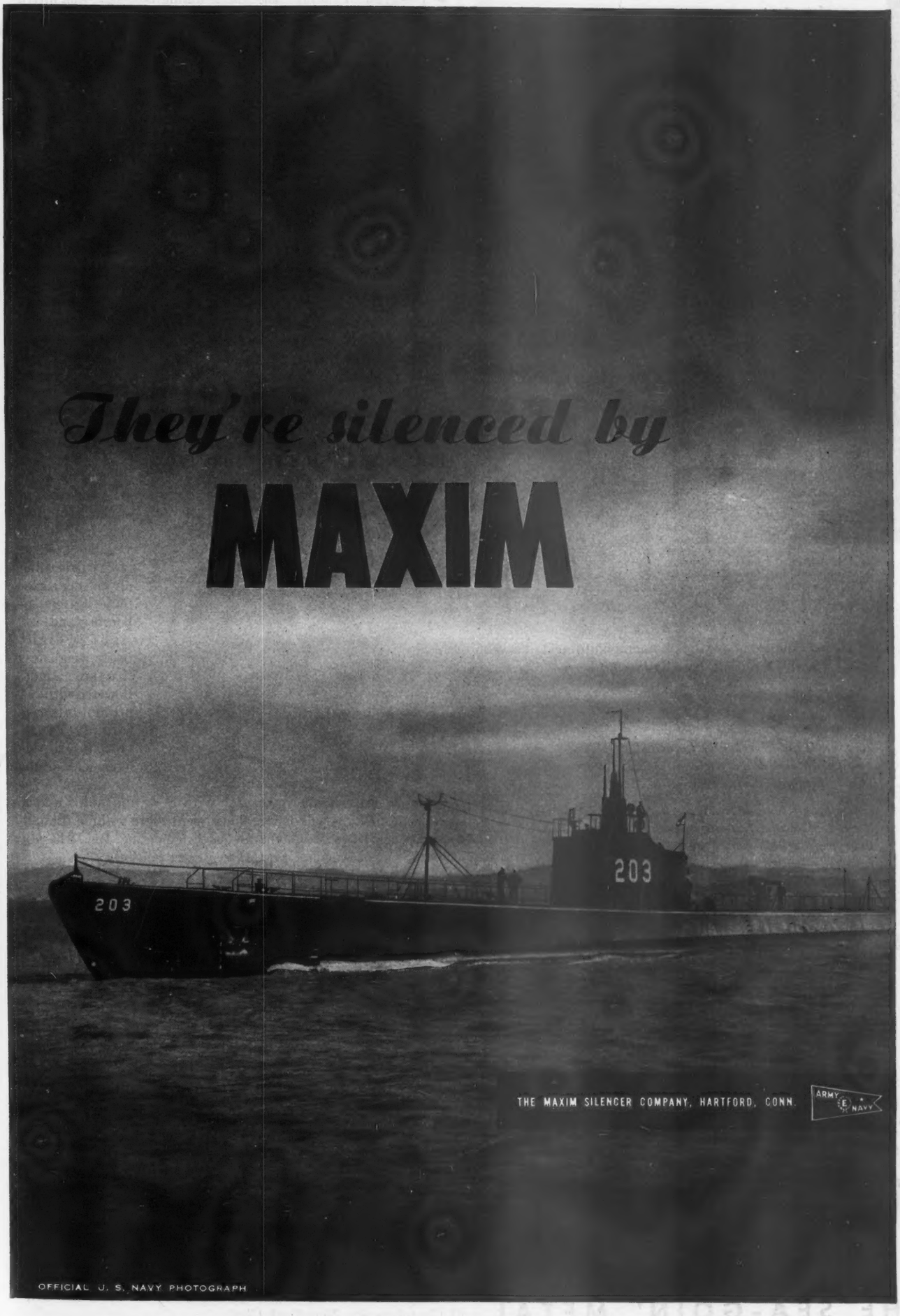
▶ Several clever devices which have been developed and manufactured for the use of the Navy in instructing novices are now available to civilians. One of the most ingenious is a sextant which is made of fiber and, in addition to the usual mirrors, sunshades and a surprisingly good vernier, also is equipped with a removable bubble attachment. Included with the sextant is a simple booklet by George Wallace entitled *What You Can Do with a Sextant.* This booklet contains some elementary but useful facts for the beginner. Price, $3.25.

▶ A semaphore trainer, consisting of a cardboard disc, having the letters of the alphabet around its periphery, is contained between cardboard covers. These covers are perforated so that as the disc is revolved the semaphore signal for the letter desired is exposed. The sending position is indicated on one side and the receiving position on the other so that the student may practice both sending and receiving without assistance. Price, 10¢.

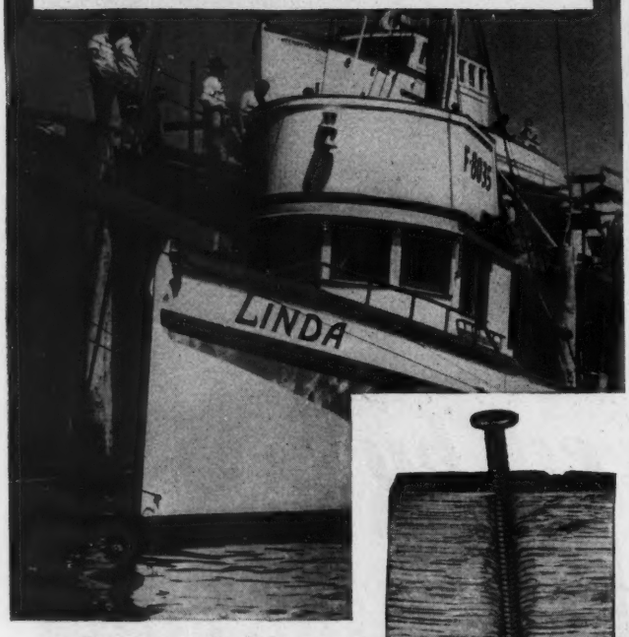
▶ Blinker signal training can be quickly taught by the use of a cardboard and plastic trainer which, when squeezed between the fingers, reproduces the effect of a standard Navy blinker light. International Morse code is printed on the back of the casing so that the student may readily read and send the signals. Small enough to fit in the pocket this gadget should help to pass many an idle hour on trains and in bunk rooms. Price, 10¢.

▶ A handy, pocket compass trainer also is included in this series of helps for nautical novices. Crammed with useful information, it tells how to lay a course, how to apply compass errors and, in fact, teaches the tyro to solve any compass problem. This trainer will be found useful to all yachtsmen, either for their own enlightenment or for the instruction of the younger generation. Price, 75¢.

All these training aids are manufactured and are for sale by Einson-Freeman Co., Starr and Borden Aves., Long Island City 1, N. Y. or by YACHTING's Book Department.


They're silenced by
MAXIM
203
203
THE MAXIM SILENCER COMPANY, HARTFORD, CONN.
ARMY E NAVY
OFFICIAL U. S. NAVY PHOTOGRAPH

"...it is a safe bet any boats built here in the future will be MONEL fastened..."



"ANCHORFAST" *nails are strong, corrosion-resistant Monel. They drive like a nail—and hold like a screw.*

The statement quoted above the photograph of the "Linda" is by Mr. Charles Lindwall, boat builder of Santa Barbara, California.

His letter also says:

"...the "Linda," recently launched, is already well known up and down the coast as an A-1 workboat. She is fastened exclusively with Monel fastenings.

For the past several years, we have been advocating the use of Monel fastenings and propeller shafts... Everytime a boat has to be renailed or the keel refastened, we point out that had Monel been the original fastener used, that much extra cost and loss of time would have been avoided..."

★ ★ ★

"Anchorfast" nails are made of Monel *to last*... and designed *to hold*. The photo shows how hundreds of wedge-shape wood fibres grip the "Anchorfast" like little vises by locking themselves into the annular grooves. By actual test "Anchorfast" nails outhold clinched galvanized iron nails, riveted copper nails, even outhold screws of corresponding size. And their holding power is permanent, because they are made of rustless corrosion-resistant Monel.

A limited supply of Monel "Anchorfast" nails is available from stock for immediate shipment on suitable priorities.

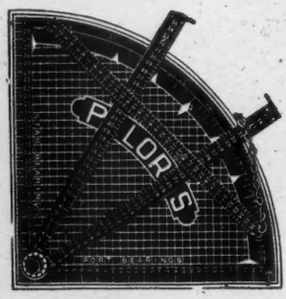
THE INTERNATIONAL NICKEL COMPANY, INC., 67 Wall St., New York 5, N.Y.

MONEL

THE SEA-GOIN' METAL

A NEW PELORUS AND CALCULATOR

▶ Designed to simplify the job of taking bearings, this instrument is handy for estimating distances, plotting courses, etc. Accompanying the pelorus is a table showing distance, time, and speed corrected to 1/100th of a mile. By the use of this table, any unknown third term may be determined if the other two are known. For example: if the vessel's speed is 13.5 knots and the time run is 19 minutes, then the distance run is determined, by a glance at the table, to be 4.27 nautical miles.



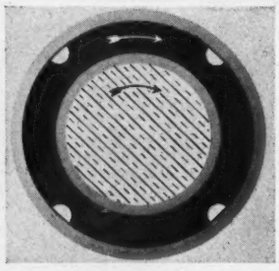
Another useful feature is a quick method of determining the necessary change in course to "fetch" a desired position. Suppose that at the time of taking the second bearing, the navigator finds that his position is eight miles from abreast of a given mark and the course being run will put the ship 1½ miles too close. He has only to bring one of the sight arms from the side of the instrument, representing 1½ to 8, and proceed to read the compass card for the amount of change required. Properly used, this pelorus will keep the navigator out of a lot of trouble. Made by the Consolidated Instruments Corp., Michigan City, Indiana. Price, $14.75.

LIGHT WEIGHT HIGH PRESSURE FAN

▶ Available in several models this fan, which was designed to re-circulate cabin air through gasoline heaters, in bombers and fast, light weight boats, weighs less than six pounds. Powered with a ⅕ hp. motor (series wound, 24–28 volt) it will deliver 320 c.f.m. air at sea level against 2″ water gauge pressure. With a ½ hp. motor and a second propeller it will deliver 25 per cent more volume. Larger sizes are also available. Dynamic Air Engineering, Inc., 843 San Julian St., Los Angeles, 14, Calif.

THE WILLIS AKERITE BEARING

▶ The unique feature of the Willis Akerite bearing is that the rubber bearing revolves with the shaft within its own bronze sleeve or bushing. This action spreads the wear over the whole surface of the rubber member and serves to prolong its life, while at the same time reducing vibration and cushioning the effect of shocks due to striking underwater objects. The bronze sleeve within which the rubber bushing revolves is readily renewable when worn. As the effective area of the bearing surface is materially greater than that of conventional types, the bronze sleeve tends to give unusual service. Longitudinal grooves in the rubber member carry off any grit which may become lodged in the bearing. Used for some time on plane personnel boats, plane rearming boats and aircraft rescue boats this bearing is now in demand for the latest types of LCTs, due in large part to its ability to give satisfactory service under the unusually exacting conditions of beach landings. The E. J. Willis Co., 91 Chambers St., New York City.

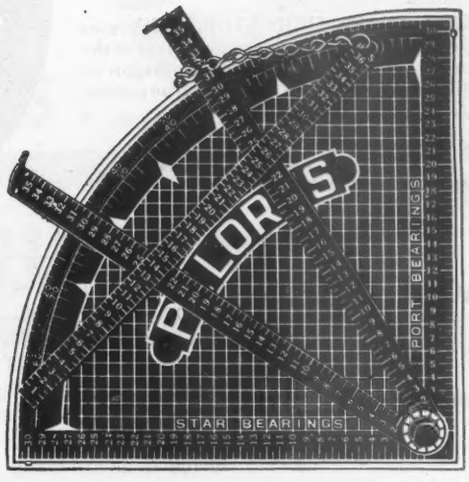


BOAT OWNERS—Here Is the

Consolidated Pelorus

a calculator for

NAVIGATORS ★ MASTERS ★ PILOTS



★ *How does that light bear?*

★ *How far away is it?*

★ *How far will we clear it?*

★ *How far to come abreast?*

With this calculating instrument, these questions can be answered easily and quickly—*all at once!*

Sturdily built, about 8 x 8 inches in size, mounted in mahogany frame. Brass sights. Directions with each instrument.

The Consolidated Pelorus is an instrument that boat owners have been waiting for. It is a simplified instrument made of non-strategic materials for taking quick, accurate bearings to locate ship's position, estimating distances, plotting courses, establishing departures, etc. No special charts, complicated figuring or book of logarithms needed. It has been used successfully for years on many passenger and freight ships . . . and previously sold for $75.

But this is the first time it has ever been manufactured to sell at a popular price and offered publicly to boat owners.

It also has special value and appeal to men in training for our Navy, Coast Guard, Army, Marine Corps, Merchant Marine and members of the Coast Guard Auxiliary and Reserve, plus owners of commercial and pleasure boats. *See the Consolidated Pelorus at your marine dealers today, or if your dealer has no stock at present, order one direct from us.* Price $14.75

Write today for full details!

Consolidated

INSTRUMENT CORPORATION

Makers of Fine Navigation Instruments

MICHIGAN CITY, INDIANA

Accurate, dependable, instant

fuel level-
rudder angle
indication
at a
glance!

THE LARGE MODEL LEVELOMETER is a dial-type hydrostatic fuel level gauge that accurately indicates the amount of fuel stored in various tanks. Since it is remote reading, the indicator can be placed in the engine room or in any other desirable location throughout the ship. For shallow tanks aboard small vessels where instrument space is limited, the TYPE "L" LEVELOMETER is ideally suited.

THE LIQUIDOMETER RUDDER ANGLE INDICATOR, which uses hydraulic or electric transmission, responds to the slightest movement of the rudder. This indicator conveys instant and continuous rudder position to the bridge. It helps save time and fuel by keeping the vessel on a true course.

Write for information:

THE LIQUIDOMETER CORP.
MARINE DIVISION
41-19- 37th Street, Long Island City 1, N.Y.

BOOKS FOR THE YACHTSMAN

LONG WERE THE NIGHTS

The Saga of PT Squadron X in the Solomons

By Hugh B. Cave

▶ It is doubtful if there has yet been published a better book on the gallant role which small boats are playing in World War II than Hugh Cave's colorful and dramatic saga of one of the most famous of the American PT squadrons. *Long Were the Nights* is the authentic account (it was written in coöperation with the officers of the squadron) of four months' bitter fighting in the Southwest Pacific. All of it is here: the violent actions; the amazing victories and tragic disasters; the dangerous long hours of waiting and watching. Most of all, it is a warmly human document of men in action — who lived and fought together, laughed together, and often suffered together. If you want to go "behind the scenes" with the PT officers and crews, here is your book. (*Dodd, Mead & Co., New York. $3.00*) C. R.

THE RAFT BOOK

By Harold Gatty

▶ This unusual little book, by the navigator of the Post-Gatty "Round-the-World Flight" in 1931, is specifically designed with the problems of the man who may find himself adrift in a rubber boat or on a life raft. It is based on the simplified methods employed by the Polynesians, who, with the crudest instruments, successfully made long voyages between distant islands. Years of research were required to unearth the data used in compiling this book which, with the charts and tables enclosed and the use of a watch, a short stick and a string, will enable even persons with no knowledge of navigation to find their approximate position at sea.

Intended primarily as an aid to castaways, this book contains lore of the sea and sky that will be of the greatest interest to sailors and fishermen. There are chapters on the habits of birds and insects, on the characteristics of cloud formations, the habits of fish, the color of the water and many more natural phenomena as aids to navigation. Star charts, a chart of the world, charts showing ocean currents and a date and time tape for determining the position of a particular star at a given time are included, as are many useful tables. Profusely illustrated, with several pictures in color, this compact little book and its accompanying charts is enclosed in a sturdy slip case. Its possession might well be the means of saving the lives of a group of castaways and it should be in the duffel bag of every sailor, soldier and flyer. (*George Grady Press, New York. $3.25*) H. de F.

"ALWAYS READY!"

The Story of the United States Coast Guard

By Kensil Bell

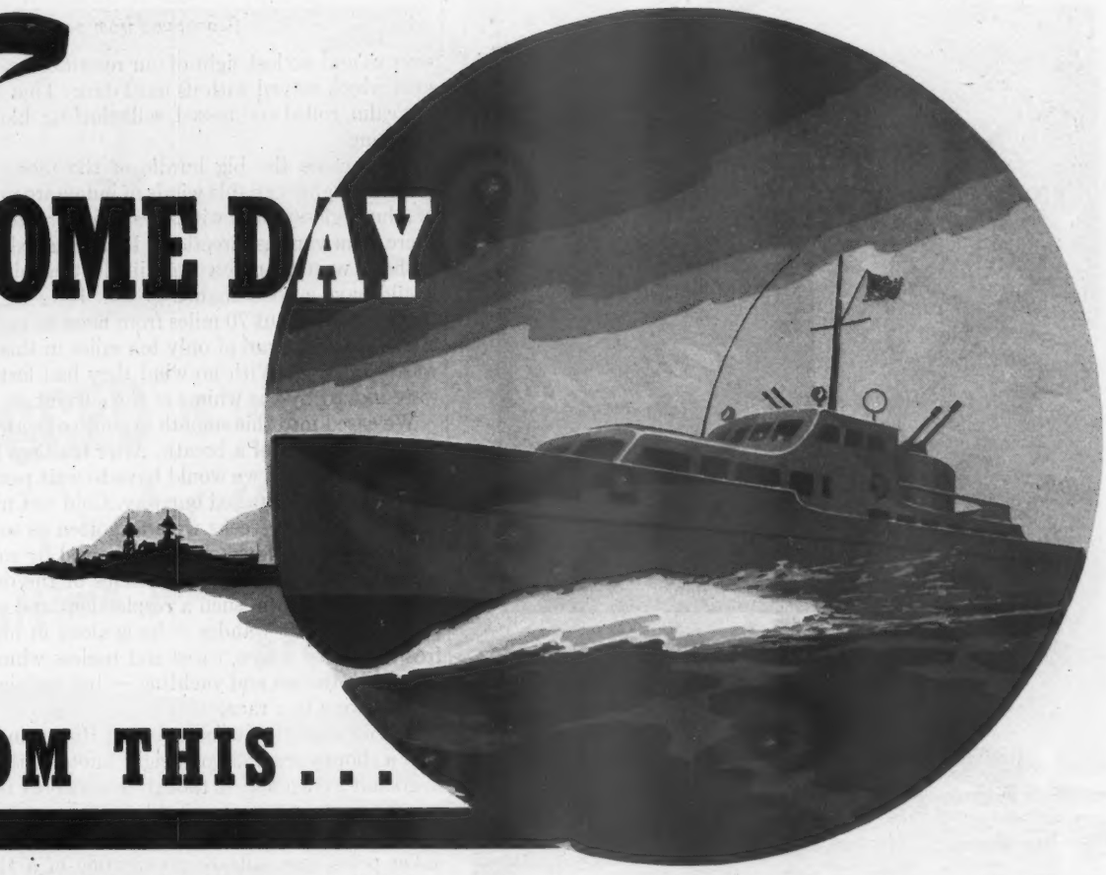
▶ This readable and informative book is the first full-length biography of the United States Coast Guard written in recent years. Its value is increased by the fact that it not only presents a comprehensive picture of that Service as it is today, but because it also offers a chronological history of its early and formative years. Men in the USCG will find it a "must." (*Dodd, Mead & Co., New York. $3.00*) C. R.

SHIP MODELS ILLUSTRATED

By F. Ward Harman

▶ Illustrating and describing in considerable detail the models for which the Marine Model Co. has developed construction kits, this book is far more than a catalog. It goes into the question of plans, tools, shaping the hull and painting. Many pages are devoted to drawings and photographs of the details of deck furniture and rigging that go to make up a successful scale model. (*The Marine Model Co., N. Y. $2.00*) H. de F.

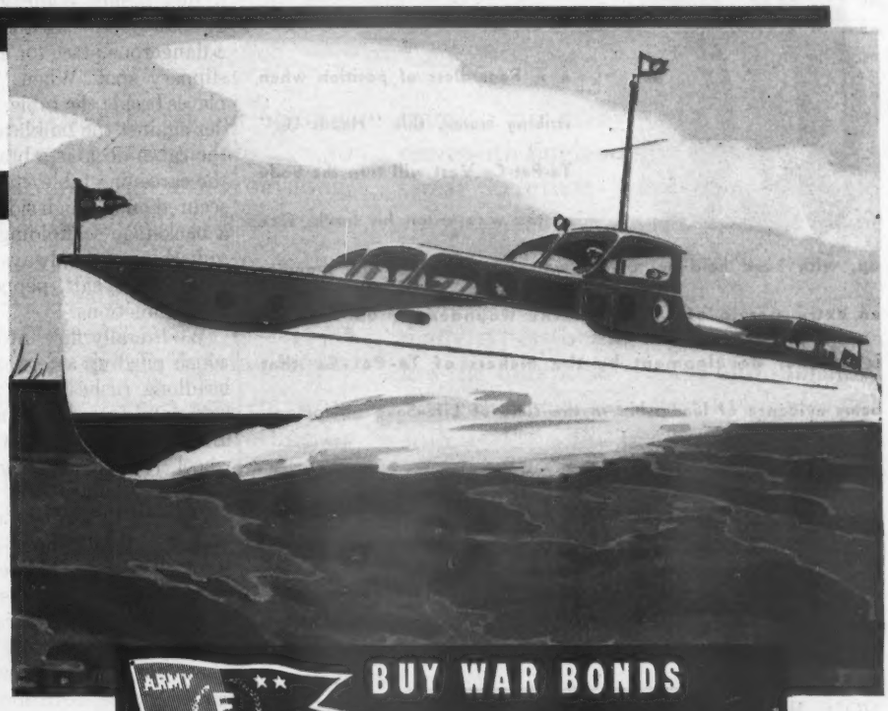
SOME DAY



FROM THIS . . .

YOUR CRUISER WILL COME BACK

TO THIS!



GIBBS converted 100% to Navy work at the outbreak of war . . . but with Victory, GIBBS will be ready to give you fast, expert service in reconverting warcraft to peacetime use. When that day comes, let GIBBS do the job for you . . . giving you the benefit of complete repair and conversion facilities and more than 30 years of experience.

ARMY E NAVY

BUY WAR BONDS

GIBBS

» » **Regardless of position when striking water, this "Heads Up" Ta-Pat-Co Vest will turn the body of the wearer on his back, face up, with head held out of the water. This feature that provides an extra margin of safety for the wounded or unconscious is another development by the makers of Ta-Pat-Co that bears evidence of leadership in the field of Life-Save equipment.**

TA·PAT·CO STAY-A-FLOAT HAS GONE TO WAR

Thousands of unfilled orders for STAY-A-FLOAT were on hand when our factories went exclusively on war work. When peace-time returns this famous patented life-save and swim-vest will again make water sports safe for young America.

NOTE: The kapok in Ta-pat-co life preservers is a critical material reserved for the use of our fighting forces for the duration.

THE AMERICAN PAD & TEXTILE COMPANY
GREENFIELD ★ OHIO

In peace and in war, the leading manufacturer of Life-Save Equipment and Sleeping Bags

RACING THE SUN

(Continued from page 37)

over us and we lost sight of our recent companions in the heavy mist which stayed with us until dark. That evening we sat in a flat calm, rolled and tossed, sails slatting, blocks banging, sheets snapping.

Then came the big hurdle of the race — the calm belt, a streak of light, variable winds of indefinite range, which consists of a huge glassy calm with occasional breezes whisking here and there from various directions. If we could slip through this area without wasting much time in drifting about, we figured we would have a good chance to win. Here we made our shortest day's run — about 70 miles from noon to noon. A 60-foot ketch later reported a run of only ten miles in this area — in a backward direction! With no wind they had lost steerage way and were moved by the whims of the current.

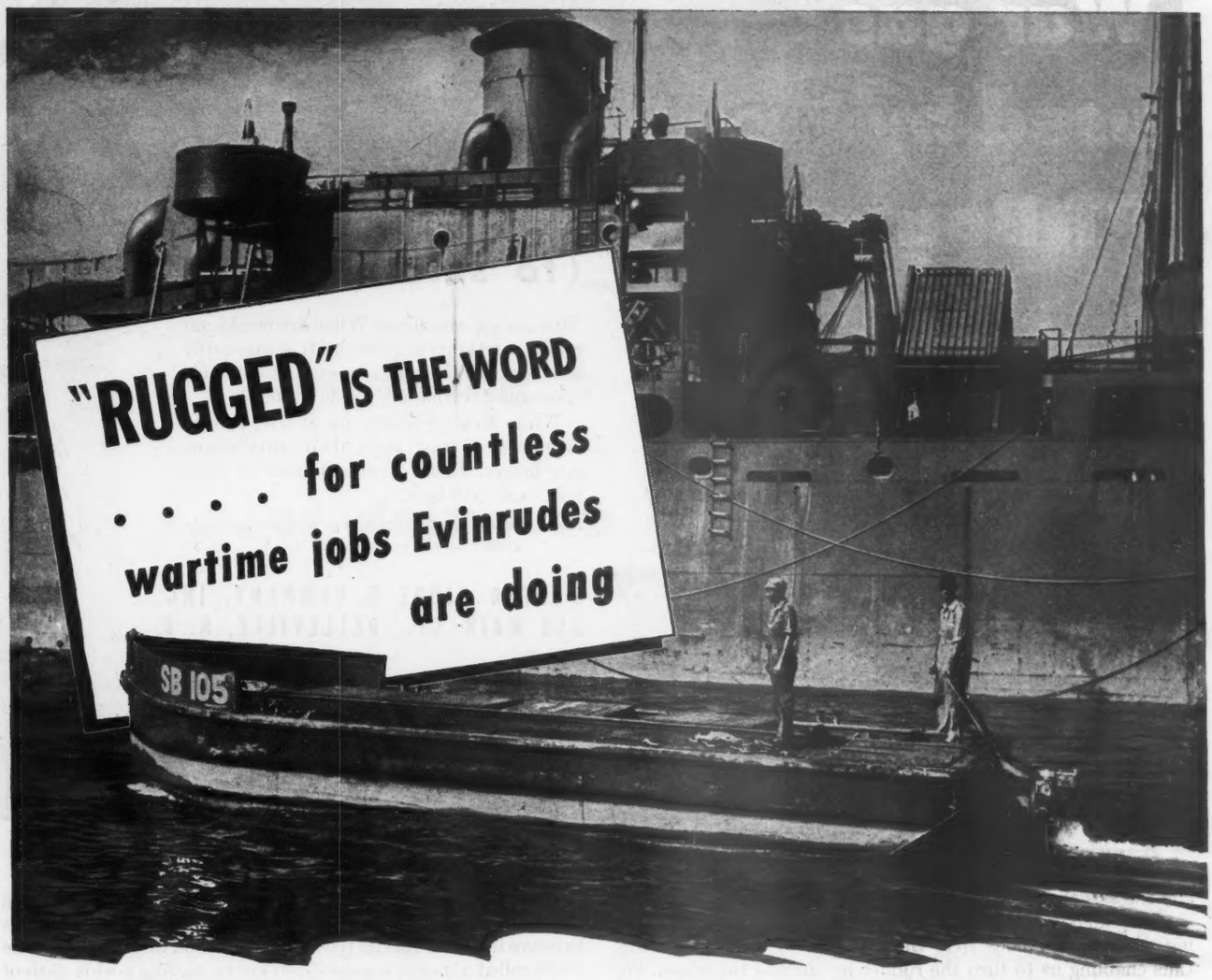
We eased into this smooth expanse of water eagerly scanning the sea for signs of a breath. After fruitless hours of watching, we finally decided we would have to wait patiently until a wandering breeze happened our way. Cold wet nights and the hard work of the past weeks were forgotten as we enjoyed the brilliance of salmon-hued sunsets followed by soft lavender shades blending into the deep royal blues of the oncoming darkness. When days close in such a resplendent and peaceful manner, a sailor's thoughts wander — he is alone in his own little world, free from city noises, cares and useless whims. I think that is why I like the sea and yachting — but we were due for a breeze, and we were in a race.

A brisk easterly puffed out Red Rover and sent us bouncing over a choppy sea at a good eight knots. A thousand more miles to go and we worked as though it were only ten. We were entering the northeast trade wind belt and were off for the finish — providing we didn't jibe and lose our masts, break both spinnaker poles, lose sails, or do any one of a thousand possibles. Little did we know what was in store!

With the ship bowling along, heeling at an uncomfortable angle and rising, dropping and pitching all at the same time, our dinner scenes made good slapstick comedy. The table, not gimballed, stood at the same angle as the deck and proved to be a dangerous place for even a fly to land, especially if he lit on a slippery spot. When "chow" time came around we took our places beside the table, resting partly on one hip with one shoulder against the bulkhead. One foot was usually stretched across the cabin deck as a brace. As each steaming pot was placed on the careening table, it was lashed firmly by a small piece of line secured on the high side of the cabin. Thus, our table looked like a backstage scaffolding with its maze of ropes and gear. But something was always bound to go adrift and send butter, stew, sugar, salt, pepper, and odd assortments of food flying in all directions.

We literally flew into Saturday, racing along on the big seas which piled up astern, sliding down their forward sides in wild headlong rushes. The *Stella* mounted a fast moving wall of water and foamed into a swelling trough. There was a loud snap in the after end of the ship. We all looked at the man at the wheel. He was spinning the loose wheel without any results — the rudder had broken! The ketch headed up into the wind, we all sprang forward to douse sail. I am sure all records were broken in taking down one Genoa jib, one mainsail, one mizzen staysail, and one mizzen in those few crucial moments. Each man's face revealed his disappointment. There was now little chance of winning the race, even under a jury steering gear. We found that the rudder post could be moved by turning the wheel but the rudder was unaffected. Ed Fabian, yachtsman par excellence, dove down to the rudder and discovered that the bolts holding the rudder to the rudder stock had sheared off, severing the rudder from the steering gear. The rudder was still attached to the hull at top and bottom but was uncontrollable. The bolts had probably weakened as a result of the strain put upon the rudder when we were towed into Monterey on the way to San Francisco, with wheel frozen hard to starboard.

After several jury rigs were discussed, Ed went down with a double rope, fastened it around the rudder and brought the loose ends back to the deck. We led the loose ends up on oppo-



"PLENTY RUGGED", say our fighting men, to sum up the tough jobs . . . to patly describe any grim task from long, forced march to furious battle action.

Rugged too are the assignments that Evinrudes are capably handling in every part of the world—from busy home ports to beachheads on distant fighting fronts.

Powering lighters, ferries, tenders, work boats . . . many Evinrudes are rolling up operating records equal to several lifetimes of ordinary duty.

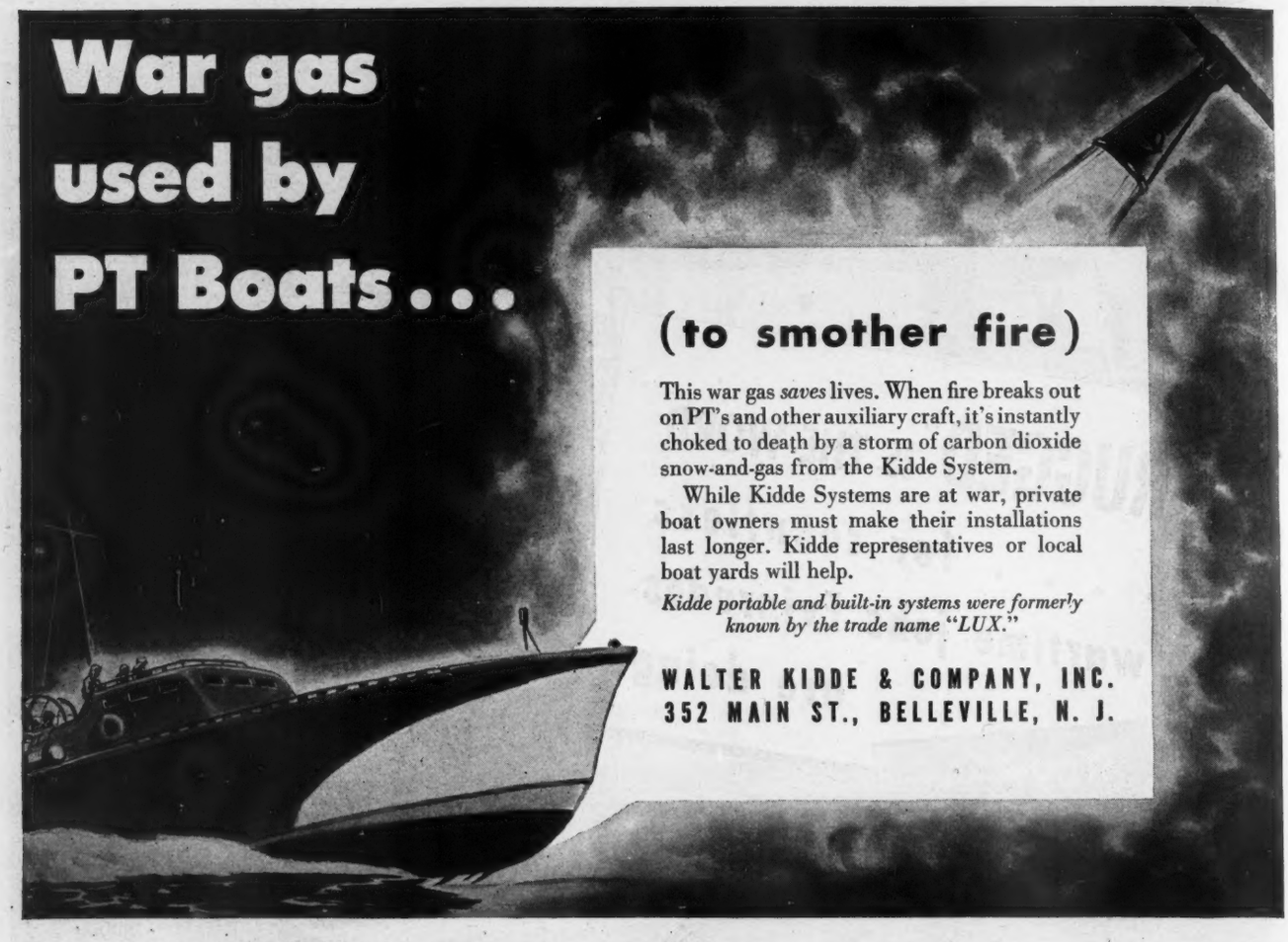
On assault craft, swift and powerful "fighting" Evinrudes have proved their stamina on many fronts. Evinrudes serve with England's famed Commandos. Great Evinrude "fours," specially developed for the purpose, drive many of the Army's speedy Storm Boats.

Motors for such service . . . motors of many types for our fighting forces . . . are the only kind we are building now. Some day new peacetime Evinrudes will follow down the production line. You can be sure they will be tops for "rugged" service . . . and that in every other characteristic, they will be sheer pleasure to own!

EVINRUDE MOTORS, *Milwaukee, Wisconsin*

KEEP BACKING THE ATTACK
. . BUY *MORE* WAR BONDS

EVINRUDE
OUTBOARD MOTORS


War gas used by PT Boats . . .
(to smother fire)
This war gas saves lives. When fire breaks out on PT's and other auxiliary craft, it's instantly choked to death by a storm of carbon dioxide snow-and-gas from the Kidde System.
While Kidde Systems are at war, private boat owners must make their installations last longer. Kidde representatives or local boat yards will help.
Kidde portable and built-in systems were formerly known by the trade name "LUX."
WALTER KIDDE & COMPANY, INC.
352 MAIN ST., BELLEVILLE, N. J.

site sides of the hull, through blocks shackled to the ends of a single spinnaker pole, lashed athwartships just behind the steering wheel. These ends were then secured to the wheel shaft, thus enabling us to turn the rudder by turning the wheel. We were still 700 miles from the Hawaiian Islands, but our only thought was to get going and make at least a showing in the race. We got underway, carrying only the mainsail to keep the strain on the weakened rudder at a minimum. The rig worked efficiently, yet was a constant source of alarm. The protruding ends of the spinnaker pole extended seven feet over the water on each side of the *Stella*. As we rolled through the water these ends were thrust into the sea, straining the guys leading fore and aft until they creaked. For five days we plowed on in constant fear of losing the plunging boom and rudder, but there was no giving up; we had an unbeatable crew!

When our rudder had been in perfect working order we would lash the wheel, let the ship steer herself, and go below to wake the next man on watch. This system became impractical with the jury rig because of the play which developed in the steering ropes. We contrived a simple "waker-upper" to make it possible for the man at the wheel to call the next man on watch without leaving the cockpit. A small line was led from the cockpit down the main hatch and through the cabins to the first bunk forward. As each of us went on watch we tied the line to the foot, arm or blanket of the man to be called at the end of the watch. At the fatal hour, a few good jerks on the line never failed to bring a drowsy body into action. It was the most unusual sensation to be aroused from a deep coma by having a blanket suddenly fly out a cabin door. The system was most effective.

Thursday, our last day at sea, blossomed under cloud-studded trade wind skies. A small tear developed in the much used Red Rover and we hauled it down for the last time — and with proper ceremony. During the early afternoon we sighted the island of Oahu, topped with bunches of billowy nimbus. Seas grew steep and crests slopped over into small breakers as we neared the island. The wind gathered weight, rushing toward the channel between the islands of Oahu and Molokai. The following seas made steering difficult. It became necessary to call all hands to heave in on one rudder line or the other and take up slack. The *Stella* rolled along at a good seven knots, leaving a wide path of white churning water astern.

Under mainsail and flying jib we swept on for Makapu Point some 30 miles distant. The fore deck poured water as the stray wave crests banged up against the side of the hull and the driving wind whipped spray across the ship. We drove the *Stella* for all she was worth. The afternoon passed quickly and evening blessed us with a timely shower and a much needed bath. The wind lessened in the early evening, and eased us by the flashing light on Makapu Point and on toward the line off Diamond Head. Our mounting spirits moved us to gather in the cockpit and rend the night air with uproarious noises resembling songs. There we yowled, self-misnamed the Light Opera Company of the Pacific: — Doctor A. A. Steele, our flute playing skipper, owner, designer and builder of the good ship *Stella Maris II*, already thinking of the next Honolulu Race; Al Adams, our golden voiced bass, anxious to get ashore and compare the dark-skinned maidens with those back on the mainland; Bob Shriner, off-pitch contralto, feeling a bit chipper as he was about to meet the gal friend who had come to the island on the *Matsonia* for the occasion; Ed Fabian, the ready, willing and able gum beating tenor, who was just itching to find his pretty Maui girl and take her skimming along the beach at Waikiki on his paddleboard; Joe Kniefel, our baritone cook, who was dying to sink his teeth into something someone else had cooked — and help Al in his comparisons.

And me — period!

In the glare of a powerful searchlight on Diamond Head the *Stella* slipped abeam of the final buoy at 11:48 p.m., 16 days out of San Francisco. After sailing at reduced speed for five days, we finished 15th in the fleet of 26 yachts and managed to nose out a 60-footer in our class on corrected time. From this performance we all commented, "Watch the *Stella* go in the '41 race!" She did — she finished first!

SCIENTIFIC DESIGN PROVIDES THE ADVANTAGE

. . . for doing a brand new job

. . . or doing an old job better

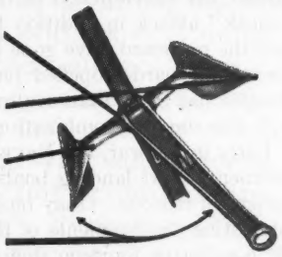
HOW THE SCIENTIFIC NORTHILL DESIGN DECREASES WEIGHT . . . INCREASES HOLDING POWER:

1. Stock at base adds to holding power—also holds fluke at digging angle.

2. Sharp fluke point digs into bottom instantly.

3. Narrow arms let flukes cut and dig deeper.

4. Angle of fluke forces anchor to bury itself.



THEY'RE active on every sea-front—new types of boats designed by American genius to fight a new kind of war.

In keeping, scores of them are equipped with Northill Anchors. For Northills, too, are scientifically designed . . . *cut anchor weight as much as 85% . . . boost holding power up to 60:1!*

Today, this modern anchor is providing all-important advantages: *lightness* for faster, easier handling . . . *smallness* that saves stowage space . . . *design* that gives unsurpassed holding power.

Such "know how" will mean much to you in the peacetime of tomorrow. It will bring you not only finer anchors, but other Northill marine products—ever newer and ever better for having been . . .

Northill Anchors are available today to members of the Coast Guard Auxiliary and to commercial fishermen. Ask about them at local Ship Chandlers or Marine Supply Dealers.

If you cannot qualify now, ask to have your name listed for a postwar Northill. They'll be something well worth waiting for.

designed by

Northill

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BACK THE ATTACK—BUY BONDS

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ARMY E NAVY

THE OUTBOARD HAS GONE TO WAR

(Continued from page 33)

Service Forces, tells a story which gives a well-earned accolade to the builders of one well-known type of motor.

"One day," he said, "General Marshall, just back from England, called up and said he had promised to deliver 400 big outboard motors for the Commandos to Lord Mountbatten. Perhaps they were wanted for the Dieppe raid. We didn't ask, but we knew that a ship was leaving on the following Monday.

"While one officer was flying to factories in Milwaukee and Waukegan, another was telephoning orders for the motors and for metal needed to make special mufflers. These outboard motors were 22 hp. and up, the type used for racing, and a racer likes lots of noise. The Commandos don't, so every motor had to have an under-water muffler. There weren't 400 motors in the factories, nor enough unassembled parts to complete the order. Using records showing every such motor frozen in the hands of dealers all over the United States, the officer got on the long distance telephone. Soon from every part of the country, 165 motors were rushed to the factories by air express.

"Meanwhile, men were assembling as many motors as possible from spare parts, mufflers were being made and attached, and the motors were being crated. On Saturday night they were on express cars, were cut into a fast passenger train and were on their way to the ship. And they were on the Atlantic Ocean on Monday before even one line regarding the transaction was put on paper!"

\+ + +

The advantages of outboard propulsion in countless types of beaching and amphibious operations are quite apparent. The design and method of installation permits the motors to be driven over bars and reefs, tilting and "bobbing" unharmed over severe contacts. Moreover, they may be driven at full speed onto beaches, and in many other ways operated at full efficiency where other types are often severely handicapped. Hence, the development of the rubber boat (so often used for "sneak" attack in addition to countless utilitarian purposes) and the outboard have gone hand in hand, and the successful use of outboard-propelled pneumatic floats in the attack on Tarawa has more than confirmed the Navy's experimentation with this unusual combination.

Early in the war, the Navy constructed a dozen or more experimental surf landing boats, a type of craft which — for a variety of reasons — may be considered to be among the most interesting developments of the war. These vessels, which are 32′ o.a., carry fourteen men and, fully loaded, considerably more. They are outboard propelled, and with a complete complement attain a speed of between 12 and 14 knots. These boats are of special interest by reason of the fact that they are constructed of plastic materials throughout, and their power plants warrant careful study because of their novel yet extremely practical method of installation.

Outboard propelled rubber boats of almost every conceivable size and type are being used in increasing quantities in almost every kind of naval operation, and range from rearmament and refueling craft to the 25′ personnel barges. In addition, the Navy is carrying on a vast amount of experimental work in connection with other equipment. Certain PT squadrons are equipped with outboard propelled dinghies; experiments have been made with 30′ pontons equipped with special reversible motors; the mammoth flying boat "Mars" carries a collapsible dinghy fitted with a 3 hp. motor; and outboard propelled small boats are now to be found on many of the Navy's landing craft and aircraft rescue vessels. The Army's L.W.L. offshore rescue boats are powered by Champion 7.5 hp. motors, and many of the same make are operating at numerous Navy air bases. And, to round out the list, certain of the Coast Guard's seagoing fleet carry dories having outboards fitted with long shafts.

But what the public does not know is that each of the Armed Forces employs countless outboard motors for innumerable duties which are in no way related to vessel propulsion. Thou-

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sands of them have been converted to fire and cargo pumps and, because they are light and portable, they are serving successfully both ashore and afloat. One of the most interesting developments has been the conversion of the Kiekhaefer Corporation's well-known "Mercury" outboard into the power plant for a chain saw designed by the Corps of Engineers. More remarkable still is the fact that the manufacturer designed and manufactured the pilot model, now known as the Mercury Powered Chain Saw, in approximately five weeks time!

To give credit where credit is due, the signal "well done" has been more than earned by America's outboard builders — Evinrude, Johnson, Kiekhaefer, Muncie Gear, Murray & Tregurtha, Champion and others. Particularly gratifying is the fact that their invaluable contribution to the Allies' war effort will enable them better to serve the nation's yachtsmen in the coming years.

PRE-TANK MODEL TESTING

(Continued from page 39)

checking the change of trim of the targets against the horizon.

As an added check, a curved spirit level filled with colored alcohol was fitted, a scale was laid off in degrees, and it was simple to read or photograph the position of the bubble on the scale. Various trims were tried by shifting the ballast, and finally the model was ready to test in comparison with that of the *Annette R.*

A platform suspended from the deck and on the side of the *You'll Do* gave opportunity to inspect and to photograph the models singly or together closely from nearly water level. To get an approximate value of the relative resistance of the two models, a whiffletree was attached at its midlength to the end of the towing boom, and the tow lines attached one to each end of the whiffletree. Thus the angle of the whiffletree gave an indication of the relative tow rope pulls, or model resistance, at various speeds.

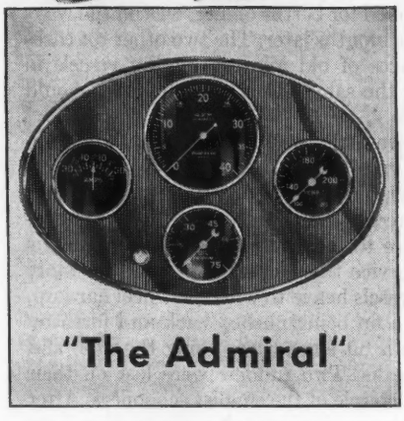
In order to correlate trials and photos, a target of white paper was erected on a light wire frame on one model, and shot holes from a BB air rifle were put through the target, a shot for each change of speed or condition; thus the number of holes registering on the photo indicating the corresponding number allotted to the run involved.

Digressing, an air rifle can be made very useful in small model work for trigger release of rudders to controlled angles for steering tests, for numbering a trial run without having to lose time to retrieve the boats for marking between experiments, etc. An interesting instance is shown by a photograph which shows a model about six feet long of a 50-knot torpedo boat. Some fear was felt that after discharging a torpedo the changed trim of the vessel might affect stability. To check on this point, two model torpedoes of the proper weight for the model tested were mounted in cradles; one of these cradles had a launching apparatus actuated by a modified figure-four trap with a target attached to the trigger. It was not a too difficult job, with the model fifteen or twenty feet away from the towing vessel, to hit the target with the air rifle pellets, and then, a-la-Rube Goldberg, the mechanism was tripped and the torpedo flipped overboard. In this experiment no effect on the model's performance could be observed.

Returning to our crash boats, towing them side by side gave a graphic indication of their relative performance. For instance, the new design at first threw the spray out from the chine much more nearly at right angles and rode harder than the other model. It also rode with a higher bow angle than the *Annette R.* model, which in turn gave a perfect replica of how its parent yacht tender ran.

Tests and changes were continued until the new model seemed equal or superior in action to the old and the whiffletree indicated that, except at low speeds, the "improved" model had less tow rope resistance than the *Annette R.* model. As a result, we knew that a speed improvement had resulted from these trials; how much, we could not tell until the model was sent to Washington to the Government model basin. There the resistance and other factors are so accurately measured that, with the available horsepower, practically the exact speed of the final vessel can be predicted, provided only that the correct propeller is used. But that is another story.

SHE RUBS HER NOSE ON ENEMY SHORES!



"The Admiral"

Many a youngster, now helping to make history, got his first "sea legs" behind a peacetime Stewart-Warner Marine Instrument Panel. Typical is "The Admiral"—adaptable for either gasoline or diesel marine engines. Today the "kin" of "The Admiral" are serving ships of war. After Victory they will again be found serving the needs of the mariners of America on peaceful waters.

OFFICIALLY, her name is "LST." That's Navy talk for "tank landing ship." Her job is invasion.

She's a long-geared gal of 327 feet and weighs 5500 tons beachside. At sea, she looks like a half-finished cargo ship. But when she rubs her nose on an enemy shoreline and opens her mouth—that's all, brother!

Out come hundreds of tons of hard-hitting tanks. Or hundreds of fighting men. Or jeeps. Or trucks. Or supplies. Then, like a well-bred lady, she shuts her mouth after she's had her say, and demurely sets out for another secret rendezvous.

Already, she has kissed the shores of Africa, Sicily, Italy, the Aleutians and South Pacific islands. Where she goes next she won't tell, but her date-book is filled for the duration.

This trouble-laden lady had to be sure of herself to do her job on time. Before the eyes of her engineer are instruments that tell him all he needs to know. Some of them, like the Oil Pressure Gauge, Tachometer, Ammeter and Temperature Gauges, most likely were made by Stewart-Warner. It's a privilege to have them there.

* * *

You've got to earn your rating to come aboard an LST . . . an AVR or any other Navy craft. That's why we're mighty proud Stewart-Warner instruments sail the seven seas. Into each device goes all the skilled craftsmanship that has distinguished Stewart-Warner instruments through the years. Tomorrow, this same precision and care, plus many important advancements learned in war will add new and greater meaning to the statement "Instruments by Stewart-Warner."

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SHEETS AND HALLIARDS GONE TO WAR

(Continued from page 29)

cutters which we would like to have left ashore with the parachute spinnakers and genoas is their curved profile. This makes hauling the boats a tricky proposition at any time, and one step worse than catching a greased pig with a banana peel when the hauling cradle is icy. I wonder how much the difference between the curved profile and a flat one contributes to speed after all?

Whether the keels could well have been heavier or lighter for this particular job is a question we'll leave to the naval architects. Stability alone is certainly only a small factor in the ability of the vessels to weather a gale at sea, so a ton or so of lead one way or the other probably makes little difference.

The same goes for scantlings of frames and other parts of the ships, as well as thickness of planking, strength of fastenings, etc. Nowhere in the whole fleet of vessels have conditions been encountered which indicate that any details of construction were too light. This, despite the fact that the boats have taken harder and longer beatings at sea than their designers ever could have anticipated. All too frequently boats have to go on the ways, but it is neither weak ribs nor thin skins which are responsible. The troublemakers, and they are bad ones, seem to be stuffing boxes and shaft logs, rudder posts, missing or in-the-wrong-place stopwaters in and around the horn timber, and cockpit scuppers installed without seacocks, a common but none-the-less dangerous practice.

One vessel in the fleet which is double-planked is as tight as a drum. Her topsides and bottom show not a sign of the pushing around they have taken from father Neptune. Yet this very ship is one that made water for months and it required three or four incisions around the horn timber to find and heal the ailing spot. Double-planking gives plenty of eye-appeal and service but, as the single-planked vessels have done very well, we'll put double planking down as a pure luxury in this type of vessel.

Rot (dry, or wet as you wish), of course, has taken its toll of patrol time. No less than three (10 per cent of the fleet) have had to have new skin or bones grafted in on account of rot. One, which looked so shining and able when she arrived that half the personnel at the base applied for berths on her, was on the ways for a whole new bow three months later. The two other rot cases were, I'm told, recurrences of old ailments in the vessels in question, and in exactly the same places. Maybe they should have been in 4-F.

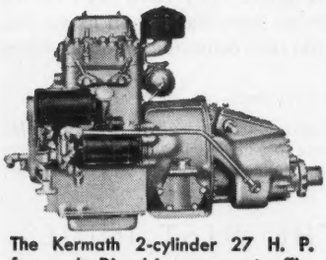
Fastenings have given so little trouble that hardly a man in the unit knows what his vessel is fastened with.

At least half the rudders and steering mechanisms have not been up to the job required of them. However, this is not surprising in that being hove to in a seaway week after week is probably the toughest service that department could possibly encounter. Most of the vessels heave to with the wheel hard up, which leaves the rudder a fin being pushed back and forth by every sea. It has to give a bit somewhere along the line, and eventually something breaks. Two rudders were lost on their first patrols at sea from a couple of the smaller schooners. After that, metal re-enforcing straps were welded to the rudder posts and since then only two more rudders have risen up astern. The deep, narrow rudders of the modern ocean racers required no such embellishments, a tribute to their design and the high quality of construction which has gone into all the boats of that type. Possibly the designers could justify them, but I believe many of the large rudders could be trimmed down to advantage.

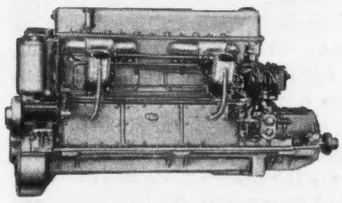
The most serious difficulties with steering mechanisms have been caused by cast arms, gears, collars, etc., snapping off during the height of the storm. They have been replaced by machined parts. The job is too tough and too important to entrust to a casting.

Propellers are about the only remaining below-the-deck-line and outside-the-hull item. We've had the usual troubles with lines in the wheels, bites taken by logs, and feathering wheels which need the shock of the bowsprit colliding with the pier to throw them into reverse. Several of the shaft installations are off-center. This has brought them in for a generous share of

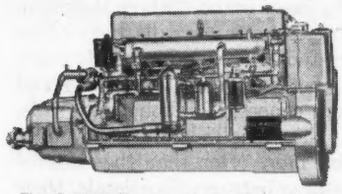
Under Three Flags...



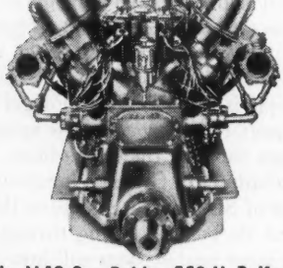
The Kermath 2-cylinder 27 H. P. four cycle Diesel is a compact, efficient, extremely economical engine.



This is the six-cylinder dual valve-in-head 225 H. P. marine engine used in certain types of landing craft.



The 250 H. P. six-cylinder Kermath is an all-marine engine specially developed for Army and Navy craft.



The V-12 Sea-Raider 550 H. P. Kermath engine for landing craft and aircraft rescue vessels.

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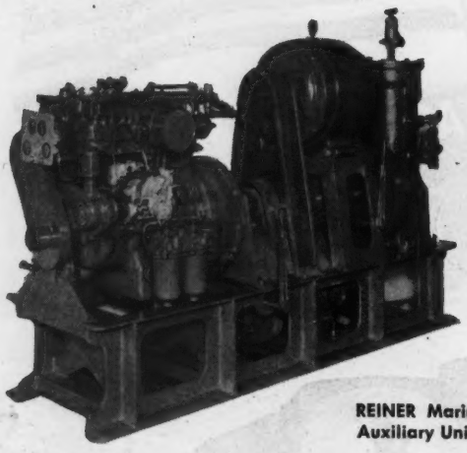

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★ ★ ★

Coast Guard cussing whenever the wind and the shaft are on the same side and the boys are bound home from ten days in one lonely spot. They don't need Phil Rhodes and Ken Davidson and the Stevens Institute towing tank to tell them off-center installations are the bunk.

As this is written, the last of our feathering wheels is being replaced by a shining new three-bladed solid one. Off center or on, the solid wheels give more speed, particularly in reverse, better maneuverability, and no trouble. We're not particularly interested in speed under sail on this job so the extra drag of the solid wheel does not matter. But the solid wheel has been such an improvement wherever it has replaced the others that I would certainly recommend it to every cruising skipper, and suggest that the racing man look his racing rule over carefully to see whether it would not give him a little added allowance.

Altogether, what the Coast Guard has sent to sea below the deck line and outside the hulls of these little ships has stood the grind very well. In the last year and a half alone they've traveled more miles and slid over more seas than their designers and builders expected of them in their whole lifetime. Most of them show it a bit when you stand under them in the shipyard, but many a formerly hidden weakness has been corrected and there is not a hull which could not do it all over again. None has yet felt the gnawing sands of a lee shore. They have been on the ways very little and in war service even more than as yachts, have justified the extra cost of the best construction many times over.

(To Be Concluded)

The opinions and assertions contained in the above article are the private ones of the writer and are not to be construed as official or reflecting the views of the Navy Department or the Naval service at large.

WHY NOT TRY THE WEST INDIES?

(Continued from page 44)

never guess how rugged the exposed windward coast can be.

From Barbados, the next port of call should be St. Vincent, due west before the trades for 100 miles, going around its south end and turning the corner into Kingstown, on the bay of that name. St. Vincent is high, its peaks rising from 3000 to 4000 feet, and can be seen a long way during daylight, although there are few, if any, lights on its windward side to guide you at night. Another British possession, St. Vincent and its chief town, are picturesque, and the harbor, while open to the westward, is good in most weathers. It is in this part of the islands that sail still holds dominance, for in the lesser islands, where the population is not sufficient to bring regular steamer calls, most of the commerce is in small schooners and sloops, and in nearly every roadstead you will find a number at anchor, or coming and going. Also, the small bateaux or canoes, with homemade sails, will be seen in quantities among these small islands. The wonder is that they don't get in trouble more often than they do, for they sometimes make long passages between the islands, their gear is poor, and squalls are frequent and sometimes hard. But the men who handle them are good boatmen.

From Kingstown, it is about 75 miles, with sheets broad off and running in the lee of the Grenadines, a string of small islands protecting you from the sweep of the sea, to Grenada. You pass on the way the larger but seldom visited and sparsely inhabited islands of Bequia, Cannouan, and Carriacou. If you have time, it would pay to look in at each of these islands, as there is a good anchorage on the leeward side of each. The best description of them and their people is to be found in Fenger's *Cruise of the Diablesse* and his *Alone in the Caribbean*. He spent much time there in his two voyages through the Grenadines.

Sailing along in the lee of the mountains of Grenada for about 15 miles, you come to the harbor of St. George, and turn the ship's bow into it with wonder at its beauty. Going through quite a narrow entrance into the inner harbor, you will find it practically landlocked, with the town of St. George and its white houses dotting the hillside on a tongue of land, and its warehouses spread along the waterfront off which you will anchor. They say this inner harbor is formed by the crater of an extinct volcano, and from its configuration it might well be so. Anyhow, it makes a good place to find a quiet anchorage. As usual, with

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Today this experience is paying extra dividends to the Navy in the form of sound construction, added protection for crews, and lower manufacturing costs. The fleet built for the Navy in the Defoe yards since Pearl Harbor numbers more than 65 fighting ships. And now a squadron of LCI (L) Landing Barges is taking form on the production line. These ocean-going invasion vessels are the spearhead of America's growing offensive. In making them, we pledge your sons all our skill and experience, all the Defoe tradition of safe, sound, deep-sea shipbuilding.

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• BUY WAR BONDS

West Indian towns, there is a carénage, where vessels may be hove down to have their bottoms caulked or painted without the use of a marine railway. While Grenada is small, it has a charm that will make you want to linger, and the people are friendly and hospitable. Although a British island, the native population have a French "flavor," as in so many of these islands that have changed hands during the 17th and 18th centuries, and speak a French-English patois.

But Trinidad and the South American coast are calling to lure you to the southerly end of your voyage. It's just 80 miles almost due south from St. George to the Bocas del Dragon (or Dragon's Mouth) that is the entrance to the Gulf of Paria, on which Port of Spain is situated at its northeast corner. The voyage across these 80 miles is apt to be rough and tumbly, for the current from the Orinoco river pours out through the Dragon's Mouth where, meeting the north east trades, the surface is tumbled up into as confused a sea as one could wish for when the trades are blowing fresh. This condition does not carry very far offshore, although the influence of the Orinoco current can be felt for quite a distance.

If the trades are light, your engine will help buck the current between Penas Pt. on the Venezuelan mainland and Chacachacare Island in the center of the Bocas. But once through, you swing eastward for some 15 miles, coasting along the green hill of Trinidad until the city of Port of Spain comes in sight with its built up waterfront and its spacious jetty. While large vessels anchor well out, you can take light draft close in, and may even find a berth in some of the slips back of the jetty. Small coasting schooners and lighters frequently tie up in there.

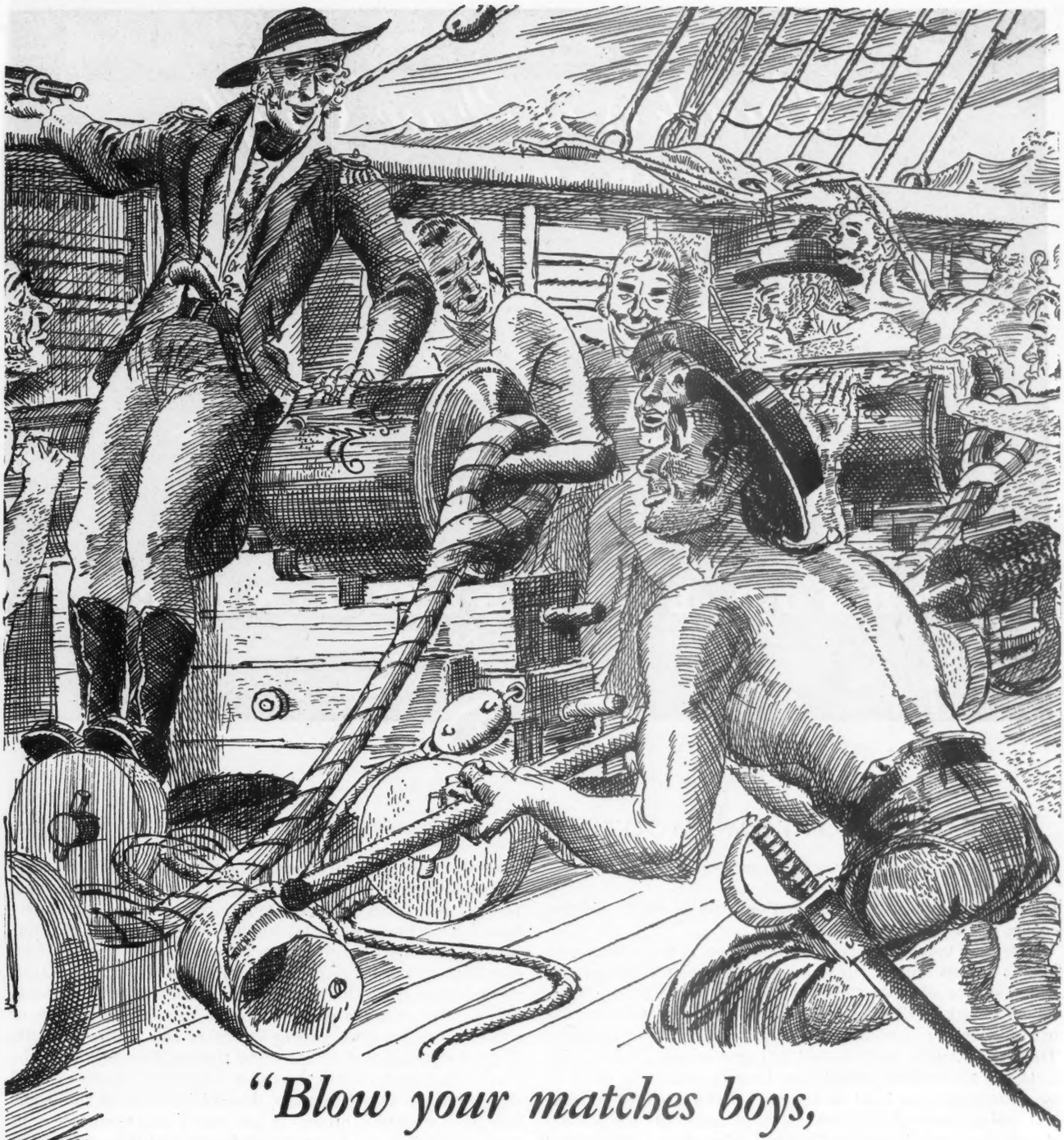
But this picture of the harbor and waterfront of Port of Spain is as it was, and as I remember it the last time I saw it, some six years ago. It is on the way to being completely changed by the war and the influx of some 20,000 American soldiers and civilians to make the island over into a military base for both the Army and the Navy. Extensive waterfront improvements are under way, including a dredged channel up to new quays and wharves where large vessels can unload.

But Trinidad can never lose its charm, or its color, even if uniforms of the Allied nations are largely in evidence, and jeeps and army trucks crowd the mule or bullock drawn carts and the bicycle and automobile. Much of this charm, outside of Marine Square which runs through the business section near the waterfront, the narrow streets and interesting shops, and the broad savannah lying on the outskirts of the city in the residential district, is in its varied population.

You will see many races in Trinidad. Perhaps the least familiar to Americans are the East Indians, which make up some third of the population. These, or their forebears, were brought from India as indentured laborers, to work on Trinidad's sugar and cocoa plantations when slavery was abolished in the island and the negroes were freed. They were brought mostly in sailing ships. After their period of indenture expired, most of them stayed and became small land holders or worked in the fields. They retain their native dress and customs, and even have their own temple.

To see Trinidad one will have to get back in the country, and there are several drives that will show you the island even as it is having its face lifted. Near the southwestern end of the island is Brighton and its famous pitch lake, from which asphalt is dug and shipped to various parts of the world.

You will find it hard to break away from Port-of-Spain, and particularly if it is the end of your voyage through the Lesser Antilles. But if you can put in another two or three weeks, you "haven't yet seen the half of it." For, sailing out through one of the three Bocas of the Dragon's Mouth, you can swing your bow westward and coast the Venezuelan shore, before the fresh, clean trades to the Dutch island of Curacao, some 450 miles away, with a chance to break the run at the islands of Margarita, from which the early Spanish explorers took home many pearls, and at La Guira. And, from Curacao, it is only a stretch of another 400 miles across the Caribbean, with the trades abeam or abaft it, to San Domingo, Haiti, or lovely Jamaica, of which the American yachtsman knows much too little. But Jamaica rates a story in its own right, and it will have to wait for another month. *(To be continued)*



"Blow your matches boys, he thinks we are a merchantman!"

IN the war of 1812, the *Essex*, commanded by Captain David Porter, sighted a warship, cruising in the Atlantic. Realizing that he might be wrecked by long-range gunnery, Porter ordered his men to house the frigate's guns and let her rigging run sloppy, like a merchantman. H.M.S. *Alert* bore down on what they considered easy prey, swept past *Essex's* stern and delivered an ineffective volley. In reply, *Essex's* ports flew open and sent a volley crashing into the *Alert* leaving her hold full of water and floating helplessly. Thus, Captain Porter, by sheer ingenuity, assured another victory for the U. S. Navy.

The great spirit that helped win the War of 1812 still lives in our Navy today. And today, American yachtsmen have a chance to serve the Navy and Coast Guard. Keep your boat and equipment shipshape and ready. And remember, War Bonds will speed the day of quiet pleasure sailing for all of us.

ARMY E NAVY

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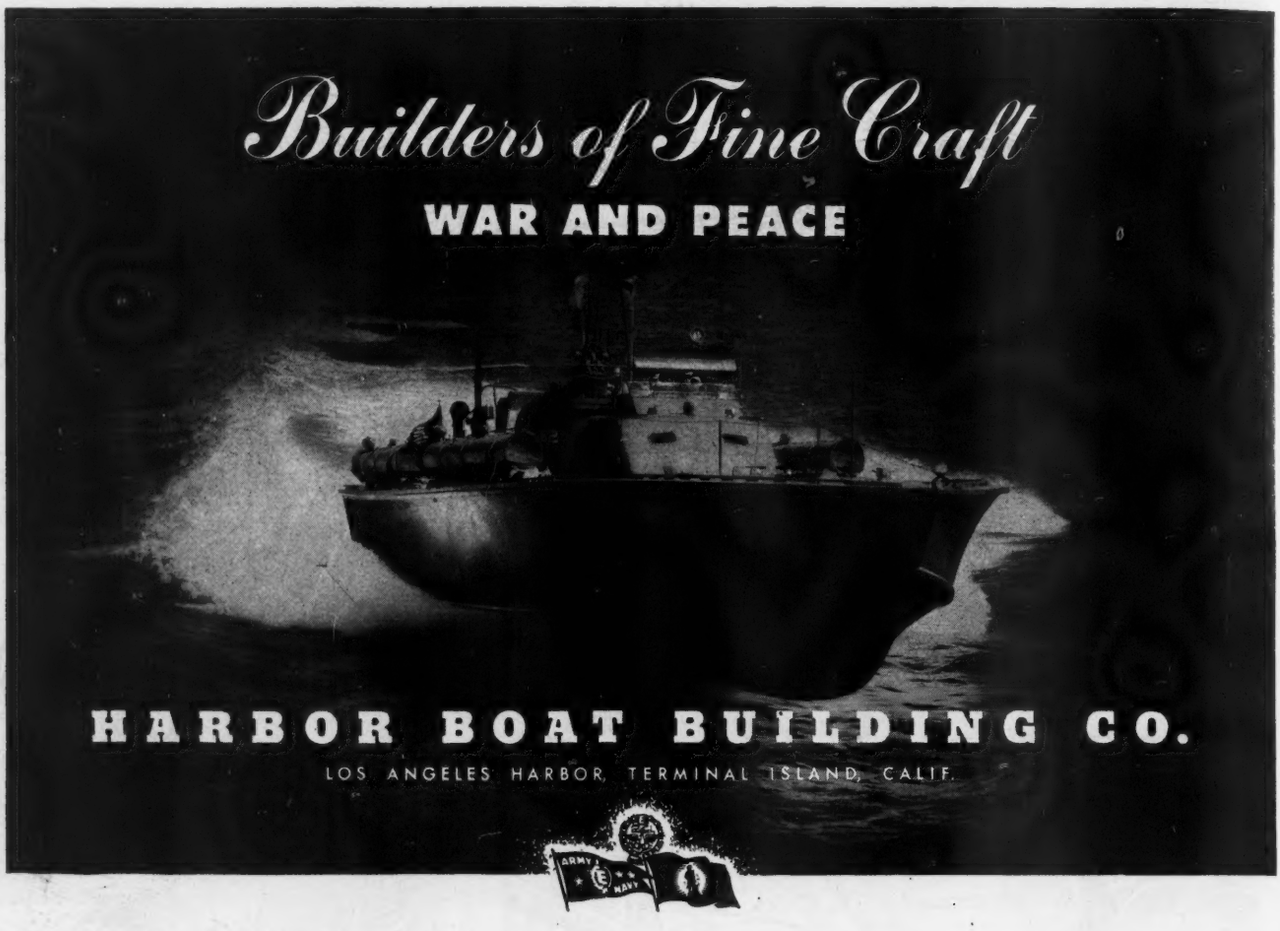

KEEP THAT BOTTOM SMOOTH!

(Continued from page 49)

the compound out through the bottom paint if the above procedure has not been followed.

Before we take up the painting operation, it might be a good idea to discuss the various types of bottom paints so that you will be sure to select the type best suited to the use to which you intend to put it. The hard racing bottom paints, including the hard racing bronze, with a few exceptions, are not anti-fouling. They are basically hard enamel and give a boat's bottom the fastest of all surfaces. Anti-fouling bronzes are next in order of smoothness and are ideal for the boat that is used for cruising and racing, particularly when frequent haul outs for bottom cleaning are not in order. Under a microscope, anti-fouling bronze film looks like tiny scales of foil or metal. The copper paints are generally rougher in surface texture and are softer in consistency. You cannot scrub them very well without removing some of the surface. In action, they gradually disintegrate, shedding barnacles at the same time. Generally speaking, they are the best for the boat that stays in the water all season without a haul out. As their name implies, they are made for anti-fouling protection, and the requirement of speed is not a governing consideration.

A hard racing finish should be applied over a hull primer. If you want an extra smooth, fast bottom, put the hull primer on over the bare wood, then a brush coat (or, if necessary, a trowel coat) of trowel cement. Then apply the hard racing finish, sandpapering lightly between coats. At least three coats of the hard racing finish, sanding lightly between each coat, should be built up over the undercoat of cement or primer. Four coats of racing finish are not too many to put on, using 2/0 "wet or dry" sandpaper, provided you haul your boat out for a number of cleanings. No painting is necessary, for all you have done is to remove one of the layers of paint. If you sail in fresh water, all you have to worry about is grass, but in a salt water boat you have to contend with the ever-present barnacle-and-grass menace as well.

Some paint manufacturers recommend applying the anti-fouling bronze right over the bare wood. Others tell you to use a priming coat of hard racing bronze first, with the anti-fouling bronze for subsequent coats, sanding between coats with a fine sandpaper. Most manufacturers recommend rubbing the final coat of bronze with a piece of cocoa mat, old sail or burlap after the paint has dried. One maker instructs users to rub the bronze lightly, just after the paint has begun to set. The purpose of rubbing is to bring the copper and other anti-fouling elements in the compound to the surface and thus utilize every bit of the anti-fouling properties in the paint. Directions on the can will also cover the use of thinners. Alcohol is of use to thin some bronzes; turpentine, others. If last year's bronze surface is in good condition, wire brush it, sandpaper and then put on the fresh coats. Launch the boat as soon as possible after paint is dry, unless the directions specifically tell you otherwise. Try not to expose the newly painted surface to the direct rays of the sun any longer than necessary. Anti-fouling copper paints are usually applied the same as the bronzes. If you're working from the bare wood up, the copper goes on right over the wood. Generally speaking, a trowel cement base is not recommended under copper bottom paints, and it is generally advisable to thin the first coat.

The inactive boat collects barnacles and grass faster than the boat that is used more frequently. The more a boat is moving through the water, the less chance she has to collect marine growths and the more chance she has of shedding them. Barnacles and grass grow more rapidly in warm water, while brackish or fresh water frequently retard their growth.

In conclusion, make a note here and now to watch your boat's bottom in the interests of speed and protection, whether she's a sail, auxiliary or a power boat. It will give you the satisfaction of knowing that so far as skin friction is concerned, you're getting everything you can from the most important surface on your boat, *her bottom.*

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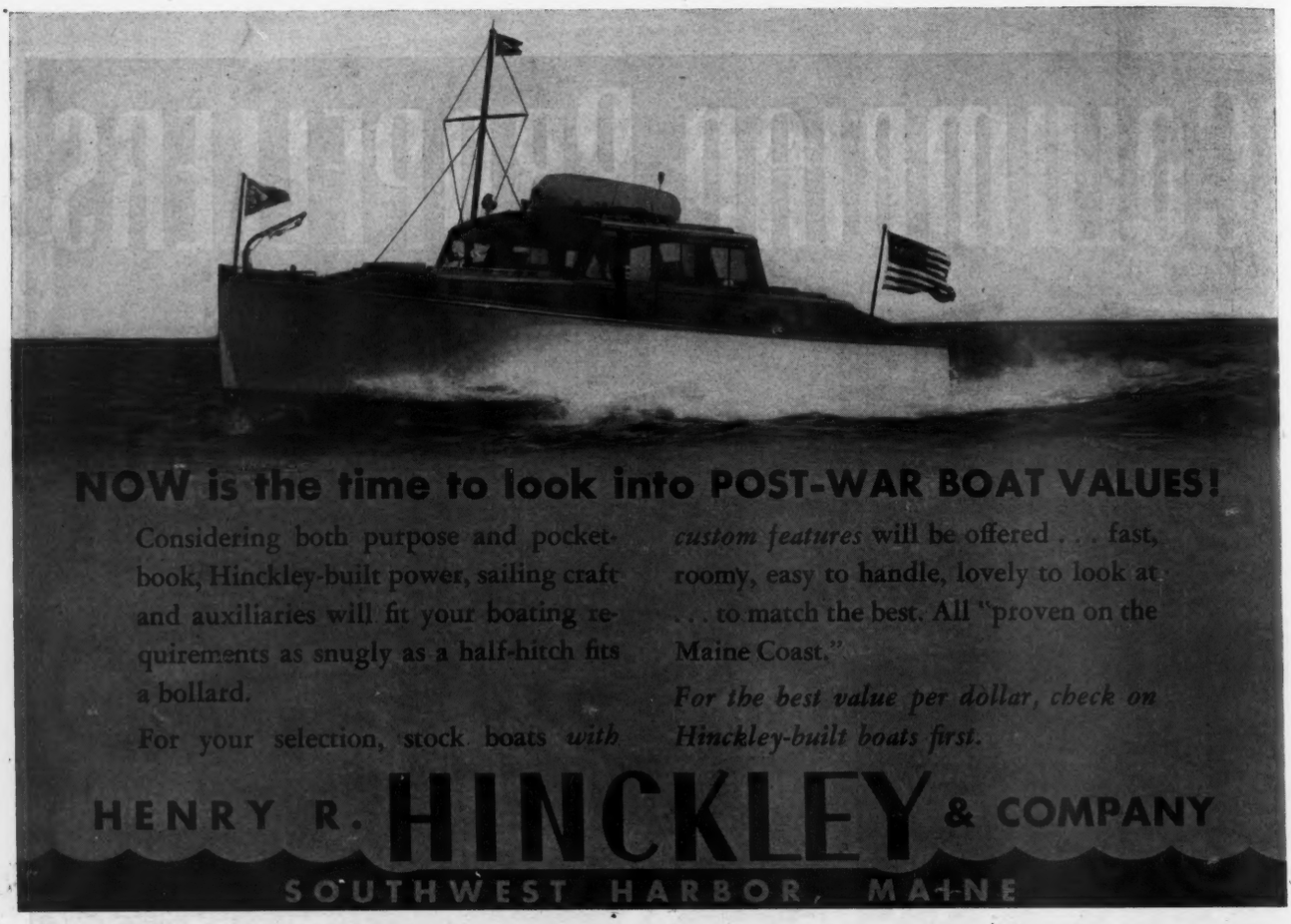
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SOUTHWEST HARBOR, MAINE

THE BIOGRAPHY OF A DESIGN

(Continued from page 54)

by Ham de Fontaine in the January, 1943, issue of YACHTING.

A word or two about the electrical system may be in order. I know, for I speak from sad experience, that a few hastily tacked up automotive "primary circuit" wires and little push-pull switches will not suffice on the average cruiser. If the circuit is 6-volt, the wiring should be all the more rugged and carefully installed. Some form of conduit should be employed, both for neatness and protection. Some of the newer types of non-metallic covered cable are available at low cost, and, used with ordinary house-wiring metal junction boxes, and full sized switches, make a neat and weatherproof installation. The cable comes in single, double and triple wire types, and may be clamped to bulkheads and carlines with U-clamps. There should be a complete, easily reached, enclosed fuse and distribution panel, as near the batteries as possible. Two heavy-duty, 6-volt storage batteries will be so wired that they are interchangeable, and one may be charged while the other is being used. Provision will be made for utilizing the 110-volt current often available at yacht basins for lighting and charging batteries.

The "engine room" below the cockpit will contain a single-cylinder, air-cooled motor with starter, generator and reduction gear with reverse. In addition to the regular generator, there will be a larger unit so rigged that it may be driven at will from the shaft, for use when the engine is used only a small part of each day. Engine controls will be duplicated in the cockpit and wheelhouse. The engine and engine bed will be rubber mounted, with a flexible shaft log and Cutless rubber strut bearing. Sound and heat proofing celotex will be used throughout the engine compartment. The problem of cooling will be solved by controlled air flow to the blower provided on the engine, this air then being ducted out of the engine compartment and exhausted aft through vents in the transom.

So much for the mechanical department. Let us look aloft at the rig. Here we find an unusual feature of the design, one dictated by the intended use for the boat — inland cruising. This is a "housing," or folding mast with the simplest of standing rigging, consisting of two shrouds on each side and a single forestay, to which the jib is snapped. The mast is solid, of Sitka spruce, and hinges in a heavy tabernacle about thirty inches above deck in such a manner that, when lowered, it lies parallel to boom and gaff on the gallows frame above the doghouse and extends but a foot or two over the transom. Since the two sets of shrouds are abeam of and abaft the mast, they need not be removed even when lowering. All that is necessary is to disconnect the headstay. In raising, a light tackle can be used on this wire and the mast given a boost by placing the boathook or some similar pole under this tackle. The shrouds will be rattled to the cross trees, which will be built solidly to provide a seat aloft. Being able to get aloft and see a couple of miles around is a great help in threading some of the Florida streams, which wind in their tortuous fashion in and out through the mangroves.

Aside from the folding mast, the rig is of the normal gaff-headed type, with single, large jib, on a boom and sheeted to a traveler. The jibsheet is led forward along the jibboom, then aft through fairleads inside the bulwarks to a cleat on the after end of the house. The main is likewise sheeted to a traveler, so that coming about will consist merely of putting the tiller over.

The basic principle employed in this design recognizes the fact that the new types of resin-bonded plywood are enormously strong, even in thin sheets, if properly braced and stayed, and securely fastened at every seam. In this manner, the whole hull is "welded" together into a unit, with every piece supporting every other piece, somewhat as in the so-called "stressed skin" construction of an aircraft fuselage. In this type of construction, the transverse bulkheads become important strength members and, by placing these in relation to the interior arrangement plan in such a way that they are cut away to a minimum for interior accommodations, each bulkhead becomes one of the regular partitions, as in a modern naval vessel. By this method, the bulkheads replace the usual framing and their number can be reduced to only six for the entire hull, at an average interval

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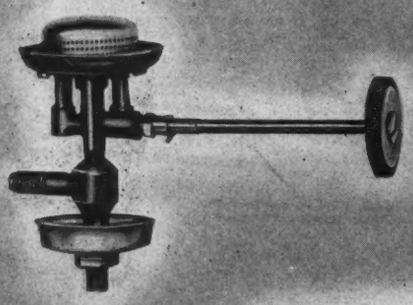

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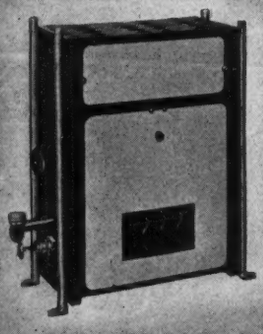

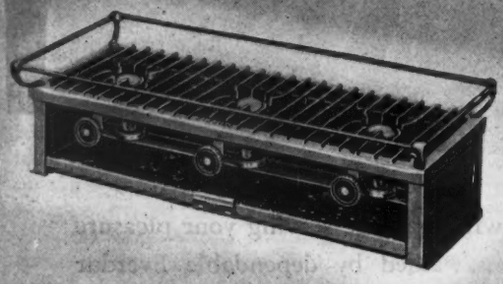

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of 40 inches. Certain auxiliary framing will be needed at points of stress to keep the ply-wood panels from "breathing" under strain.

The keel members will form the primary backbone of the structure, but even here, to simplify amateur construction, and perhaps strengthen the resulting structure, the keel itself may be laminated of two-inch yellow pine between two side pieces of one-inch fir plywood. To this keel, and through it, will be fastened a moderate amount of outside ballast — about 800 pounds of iron bars molded into concrete. In view of the ample beam and a reasonable amount of inside trimming ballast, this composite ballast shoe will be sufficient, and far cheaper than an iron or lead casting. A laminated keel apron, or keelson, of two pieces of one-and-a-half-inch pine, bent separately, then glued and screwed together, furnishes the landing for the bottom panels of plywood, and through bolts connect the floors, through this apron, to the keel proper and the outside ballast. Chines will likewise be laminated, to avoid bending stresses and rabbetting, and to permit a smoothly rounded corner to the chine.

House sides will be fir plywood over spruce framing, and house roofs, as well as all decks, will be of half-inch, hard surfaced Masonite, laid rough side up, and uncanvassed. This presents a permanently non-skid and water-tight surface, hard enough to withstand all sorts of rough treatment; and also supplies valuable diagonal bracing to the whole structure, making deck strapping unnecessary.

An "outdoor" rudder, of ample area, will be built with an oak stock and trailing edge and two pieces of heavy plywood, and will have slots cut in the blade at appropriate places to furnish a permanent boarding ladder for swimmers. When sailing, and when under power in fair weather, a conventional tiller will be used. The inside wheel can be connected instantly through stainless steel cable and sheaves by dropping a pin into a sliding quadrant mounted on the after side of the rudder stock.

A word about color. What real boat lover, dreaming of his perfect ship, does not envision her imaginary lines painted sleekly in his favorite shades . . . or perhaps he tries out several color combinations on her in his mind, if he is lucky enough to be that open minded. The writer happens to prefer this color scheme: black boot-topping (does not show the inevitable oil skimmed from industrial harbors), medium dark blue-gray topsides, white cabin sides and light blue decks and roofs (reflects the sun's rays, making for a cool interior). Combine this picture with sails made from a deep red duck, on a mast finished bright with a white topmast section, — place the whole on a background of a bright blue bay, sprinkle lightly with sparkling whitecaps, and you have a scene which I, for one, cannot for long put from me.

Returning to the progress made with this design so far, we find a small scale, cardboard half model made when the lines were first determined. This was used as a check on the fairness of all lines, and the general appearance of the hull and cabin. Sections, body plan, and all other necessary lines for a V-bottom design have been accurately drawn to an inch-to-the-foot scale, and calculations made for displacement (5300 lbs.), and centers of buoyancy, effort and lateral plane.

From tracings of these large scale drawings, one-inch scale, construction sections were made, giving all bulkheads. From these, and other drawings of the actual boat, a perfect scale model has been begun, using scale thickness waterproof mahogany plywood, with white pine scantlings and brass and copper fastenings, even the latter being kept to scale.

This model has been a fascinating pastime in itself, being the next best thing a Navy pilot on active duty can find to building and sailing the actual boat. Every member and fitting is being worked out, down to the sheaves and cable on the steering gear, and the locks and rigging for the folding mast. Using the marine architects' laws of similitude, displacement and trim can be checked, as well as the boat's wave-making propensities at scale speeds, both under sail and power — the latter consisting of a small electric motor, placed in the hull temporarily.

Thus, when completed, and with the correct ballast and accurately made sails and rigging, there is no reason why this 24-inch should not anticipate in every detail the performance of her future prototype. Are not all true yachtsmen optimists?

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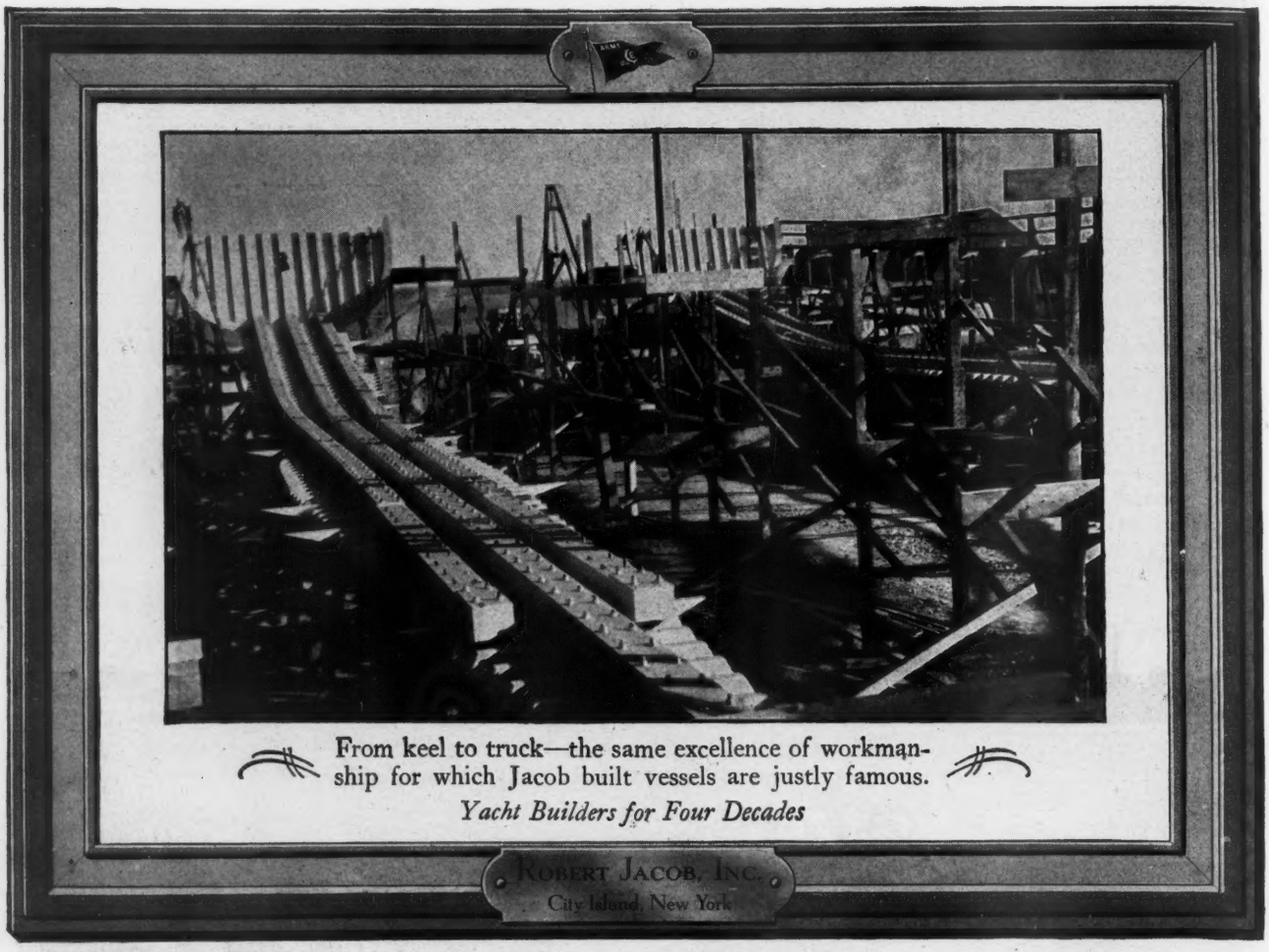

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DESIGN FOR DINGHY SAILING

(Continued from page 55)

I quote the latter: "It would appear, judging by the popularity of the various 14′ dinghy classes dotted about the country, that the time is ripe for some central governing body to take the matter in hand and give us one big universal dinghy class. If an expert got to work on the various rules, he would, I think, find no serious differences between any of them, and certainly not any but, with a little give-and-take all around, might easily be overcome. The National 14′ dinghy restrictions seem to go a long way to bring the various classes together and, with a little spade work by some governing body, we should soon have a real universal 14′ dinghy class."

I received an invitation from the promoters of a Marine & Small Craft Exhibition & Congress to be held at the Royal Agricultural Hall, London, to address a conference of dinghy sailors. I found a good collection of dinghy men present, including some delegates from Holland, and my speech seemed to go down all right as they passed a resolution. . . . "That the YRA be invited to convene a meeting of delegates of all clubs with a view to bringing about improved uniformity and so encourage national and international dinghy racing."

The YRA rose to the occasion and a meeting was convened for the 14th of February, 1923. The conference was presided over by Major Phillip Hunloke, who sailed *Britannia* for King George V, supported by Sir William Burton and other members of the Council of the YRA. The real move forward was brought about by Lieut. Commander E. G. Martin, of Fastnet fame, who suggested the formation of a committee of management under the auspices of the YRA and whose members should be drawn from the various parts of the country where dinghy sailing was in progress, somewhat on the lines of the West of England Conference. This was the birth of the Dinghy Committee.

The Prince of Wales presented a Challenge Cup in 1927 for competition in the 14′ class, which became the most important event of the dinghy year, and had the effect of stimulating the sport in a way that nothing else could have done.

Since the foundation of the 14′ class (which has now become the International 14′ dinghy class), some 432 boats have been built. In 1935, the committee sponsored a 12′ National dinghy class, of which over 412 boats have been built, and in 1938, was requested to draw up restrictions for an 18′ clinker built, restricted class for use on the East Coast and the Thames Estuary. So many boats would not have been built unless prospective owners had felt that it was a safe bid to go in for a new boat because it was a YRA class, and "international" at that. So, if for this reason alone, the committee has justified its existence.

It is regrettable that the most expensive boat is generally the best and, in a class where the average of helmsmanship is exceptionally high, it pays to get the best if one desires to be in the first flight. Good second hand boats always seem to command a satisfactory price so, for a keen dinghy enthusiast, it really pays to go in for a new boat about every other year. The 12′ National class has had a rapid increase, all the boats being built between 1935 and 1939. The YRA was very wise in putting a price limitation on the hull, spars and design of £50, sails extra.

Recalling what happened after 1918, it is my opinion that after this war there will be a great wave of interest in dinghy and small boat sailing and it is as well to be thinking about it now. There are scores of good boats in Great Britain waiting to be sailed, and the same holds good in America. It may be some time before good, well seasoned woods become available and that is why it is so encouraging to read of new developments in the art of boat building. Possibly a Penguin type, increased to 14′, with two sails, will supply what is wanted for many but, whether it is a cheap or expensive type, it is essential that the designs adopted be of the best and modern in conception. The restrictions of the 14′ International dinghy as they now stand have fostered a boat which is par excellence both for sea and river sailing, and the same can be said of our 12′ National dinghy.

Unity of command pays in other spheres and one wonders whether a National Dinghy Committee in the U.S.A. is feasible.

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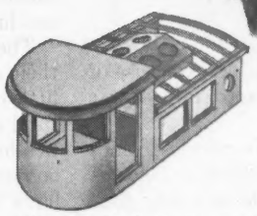
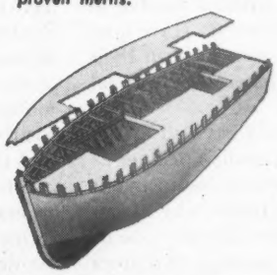


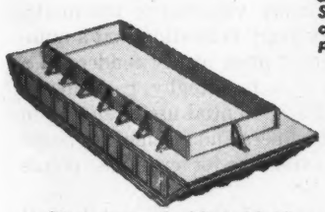
SUPER-Harbord giant panels are a prerequisite for much deck house and sub-assembly work. Strong, waterproof, weatherproof SUPER-Harbord marine plywood has many proven merits.

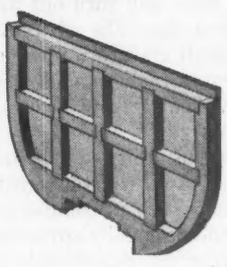


Two giant panels, power-sawn to fit, form the complete deck of this 46' Army tug. Vexing, costly, laborious caulking is eliminated. Related thickness is reduced by reason of the plate-strength of plywood; hence over-all deadweight is minimized and center of gravity is lowered.

Giant panels . . . mill-joined sheets of SUPER-Harbord are scarfed to a ratio of 1 to 12, meeting Army-Navy requirements for high specification work. Plywood may be worked with hand or power tools: Decking, for instance, may be shaped quickly with a power saw and edge angles jigged to fit combing mold. Production is speeded up, as a simple jig set-up permits duplication of shapes with minimum tolerances. This plywood may be steamed, if necessary, to accommodate it to certain types of hull forms. SUPER-Harbord giant plywood panels are available as LONG as you want by 9' wide, or as WIDE as you want by 9' long. Orders are accepted for immediate delivery, subject to Government allocations of fir plywood. Write or wire for detailed information.

Giant panels are ideal for composite bulkhead construction. Space and weight are reduced and durability improved. Scrap cuttings, if any, have application as gussets, fish plates and webbing.





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Combination: Navigation Note Book and Plotter	3.60
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Speed-Time Distance Calculator	1.00
Dalton Mark VII Computer	$7.50
Dalton Type E-6-B Computer	10.00
Dalton Model "J" Computer	40.00
Dalton MK. II, III and IV Plotting Boards, Respectively	$8, $18, $12
Navy Plotters 641 and 700, Respectively	$1.25, $1.50

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Illyne Star Chart 31" by 21" with instruction booklet	1.00
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Observoscope	20.00
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NEW BOOKS

Short History of Navigation	$1.50
A Navigator's Introduction to Astronomy — Hyatt	2.50
A Pilot's Meteorology	2.50

THE POST-WAR YACHT

(Continued from page 47)

be adapted to yachts. The installation and the increased use of direction finders undoubtedly will be another factor in post-war pleasure craft."

From Norman R. Kevers, of the Electric Laboratories, comes a provocative set of questions, the answers to which he believes every architect, builder and yachtsman should seriously consider. Here they are: "1. Has anyone ever seen a boat under approximately 65 feet, the electrical system of which was not overloaded? 2. Did anyone ever do any practical design work on the electrical system of a boat with any thought in mind other than to hope there would be enough power available to start the motors about three-quarters of the time? 3. Have boat manufacturers made electrical accessories a step-child in their designs, and equipped boats with only the barest of electrical necessities?

"I believe the 'Yacht of the Future' should have all of the following engineered into the boat in a workmanlike manner as standard equipment: a. Automatic bilge pumps amidship and at the low point in the stern when the boat is under way at designed cruising speed. b. Adequate engine room blowers (one or both for use prior to starting motors, and one running off motors in such a manner as to guarantee the engine room being free of fumes when boat is under way without having to depend on the present day use of ventilators). c. A good set of horns. d. Running lights that light — all cabin boats having minimum battery power of 12 volts, with twin-motored boats over 32 feet having 24 volts, and all boats over 45 feet having 32 volts. e. Interior design should incorporate fluorescent lights, radio, phonograph and telephone; and locker space sufficiently large and convenient to accommodate the equipment should be designed into the boat. f. Practically everything on the boat should be designed so that it may be used on a 110 a.c. line. It would not be feasible to have all this equipment running on 110 a.c. all the time through a converter; however, it could be designed to operate at its customary voltage through a step-down transformer from the 110 a.c. line."

There is a growing trend on the part of all yachtsmen to keep their craft in the water just as long as is possible, and there is little doubt that the problem of adequately heating the average sized craft has been one of the principal reasons why the practice has not become more widespread. The answer may be in one or another of the types of small automatic heaters which have been developed for installation aboard small warcraft. "We can assure you," reports J. A. Fabrie, of the Stewart-Warner Corp., "that the 'South Wind' heaters can and will be adapted for heating the cabins of the post-war pleasure boat, whether she be sail, auxiliary or power. The fact that we shall have available completely self-contained equipment that can be located in any strategic position in a vessel and the ventilating air ducted wherever it is needed; that the fuel supply can be that of the motor or a small auxiliary tank; that the electric power consumption will be extremely low; that the unit itself will be positive in action and reliable in its operation, makes us believe that the post-war purchaser of boats will, for the first time in yachting history, demand the inclusion of heating equipment in his craft."

One of the most significant developments of the war has been the design and manufacture of many varieties of pneumatic rafts and boats, and there is today every indication that a number of firms will turn out moderate price utility tenders in a variety of sizes. The advantages of such a dinghy, particularly for a small craft, are obvious. The potential use of rubber in tomorrow's yacht is a subject of endless and fascinating possibilities. The Hycar Chemical Company, for example, points out that:

"It seems probable that fuel tanks in future automobiles will be made of oil resistant synthetic rubber, similar to the fuel tanks now used in combat aircraft. It seems logical that this idea could be equally appropriate for yachts whether the fuel be gasoline or oil. Space could be used to better advantage and maintenance would be much less. There are many possible uses

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He helped to build the 83-foot yacht "Pilgrim," then opened his own shop. When the war began he brought his energy and training to us and is now working on boats for the Navy.

Norman H. Hodgdon, Jr. is another of the "old timers of the future" who are helping American shipyards to make their important contribution toward the winning of the war.

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for various types of fabric treated with synthetic rubber: synthetic rubber tiling, and decking; artificial leather made from synthetic rubber; fabrics impregnated and coated with oil resistant rubber would be ideal for many marine uses. Rubber water tanks are also a post-war possibility."

One of the interesting new materials to come from the rubber manufacturers is the U. S. Rubber Company's V-Board. The manufacturer describes it as "a product which is a combination of resin and filler. It can be made into virtually any shape or form and has both structural qualities and eye appeal. In wide use as a war product now, V-Board has many manufacturing possibilities. The yachtsman will be interested in it primarily because it has very high abrasion and chemical resistance, it needs no repainting, it is lighter and stronger than other materials used in small boat construction and it can be turned out as thin as a tablecloth or several inches thick, in any color or design. The shell of a boat made from V-Board can be molded into a single piece, thus eliminating caulking; seats and braces can be easily installed, as V-Board may be machined the same as metals. The finish is so smooth that it has scarcely any surface resistance. A boat made from V-Board could easily be lifted on and off a car top by one person, making it just the thing for the transient or week-end fisherman."

Any discussion of synthetic rubber carries one's mind into the field of chemistry, yet one might well ask, "What has chemistry to do with the post-war yacht?" The answer may be given in the form of the old adage, "There is more beneath the surface than meets the eye." The activities of large organizations, such as the duPont interests, in post-war development are well known, as is attested by their description of a few of their products which will undoubtedly be used by tomorrow's yachtsman. "For example," they write, "there is nylon rope, which is so sturdy that it replaced manilla rope and cables in peace-time airmail pick-up operations. It seems admirably suited for use as sheets, halliards and painters. We also believe that paint brushes, bristled with tapered nylon filaments, will be in as great demand for painting peace-time yachts as they are now for painting warships. Nylon in its new form, FM-1, is unique among thermoplastics because it withstands distortion at normal operating temperatures and has great strength in thin sections.

Various experimental agencies of the Navy's Bureau of Ships, as well as of private companies, such as Wilbur & Williams, The Cuprinol Co., and others, have made great strides in the perfecting of innumerable types of wood and metal preservatives. Today the swelling and shrinking of wood can be controlled to an astonishing degree, and the ability of these various agencies to ward off dry rot is well known. However, experimental work is now under way which gives great promise of producing impregnating solutions which will cause wood to be not only incombustible but resistant to certain types of marine borers; and there is every reason to believe that these chemicals will be on the market at the war's conclusion. Moreover, the Army's and Navy's floating equipment has provided the paint manufacturers with opportunities for endless research and, although it is as yet too early to make any predictions, it can be stated that marine paint of the post-war period will have many new and beneficial characteristics.

The post-war yacht, in Irving Jakobson's opinion, is one in which "all interior joiner work will be made in easily removable units so that, if hull repairs are needed, the joiner work can be readily removed and replaced with but little expense. . . . I am not sure whether rigging can be simplified to any greater extent than it is now, with the possible exception of using synthetic materials for rope. Sails will be made of transparent synthetic materials so that the trim of the headsails may be watched by looking *through* the mainsail."

Henry Nevins is among those who think that nylon rope, nylon for sails and covers, and certain impregnating substances for canvas are far enough along to bring forth some interesting developments. Mr. Nevins, when mentioning "impregnating substances for canvas," put his finger on a matter which has been the subject of endless experimentation for the past fifty years or more. There are many practical methods of canvas impregnation, but relatively few of them have been feasible in conjunction with sailcloth. However, it is now rumored that

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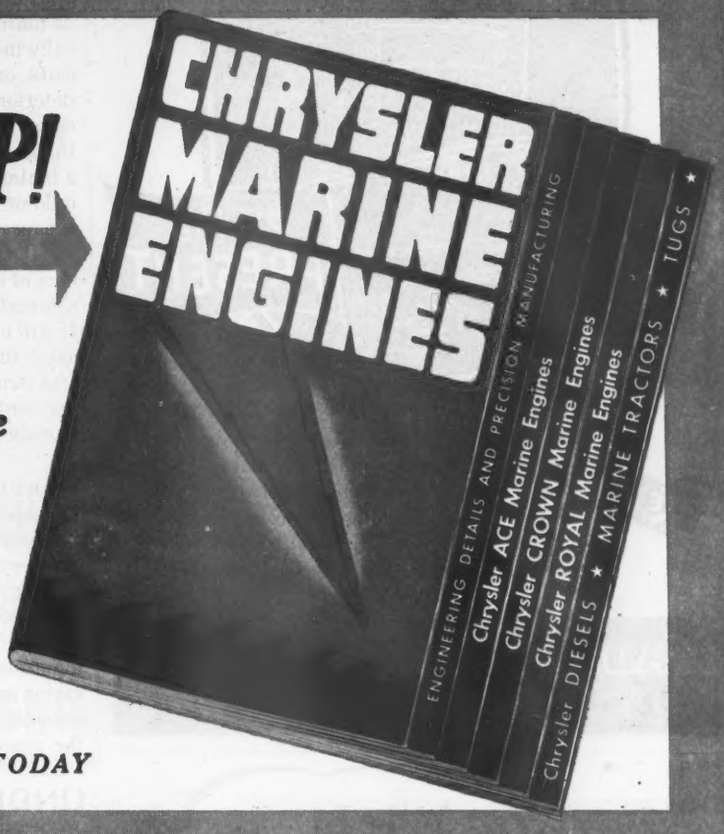
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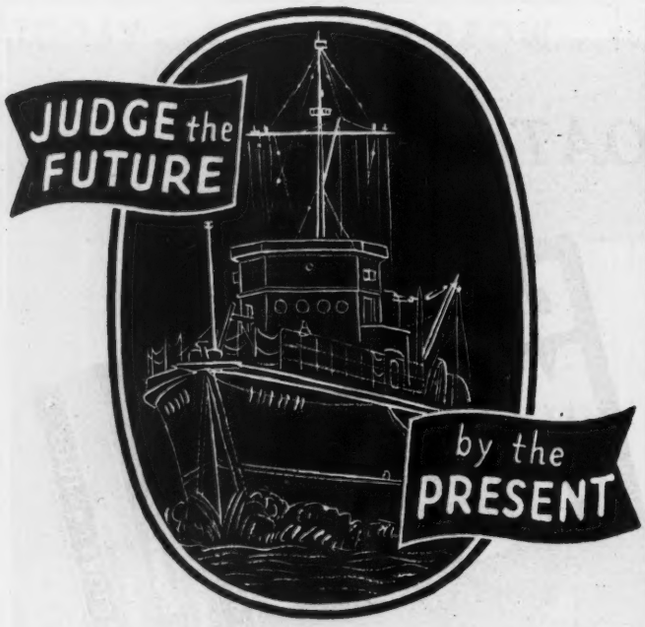

When the time comes — when you begin definite, concrete plans for your postwar boat, we will be ready to plan with you. Our experience in building Minesweepers and Patrol boats *now* will stand us and you in good stead when planning for the future!

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CLEVELAND, OHIO

VAST IMPROVEMENTS in roominess, comfort, convenience and operating efficiency which definitely portend the boat of the future, are exemplified in "Sally Duck", Greenport's final pre-war cruiser. Experienced boatmen will find these features definitely characteristic of a craft years ahead of her time.

We will include these same typically original innovations in your new Greenport-built sailboat or power cruiser. Write us your requirements.

Ernest Ratsey and Houlder Hudgins have combined to introduce (at the war's end) a new sailcloth that will have the trade name of Duroduck. If it is successful, as it is claimed to be, it will be the answer to every yachtsman's prayer.

"For several years," writes Mr. Hudgins, "I have been experimenting in other fields with a chemical compound technically known as polyvinyl chloride which is well known under the trade name of Koroseal. This is practically a miracle product with desirable properties too numerous to catalogue; but so far as marine use is concerned, these are as follows: 1. It is chemically inert, meaning that it is unaffected by acids, alkalis, soaps, salts, or oils. 2. It has indefinite life, meaning that it does not deteriorate materially with age. 3. It has resilience and elasticity equal in every way to rubber. 4. It is substantially fireproof, in that it will not support combustion. 5. It resists abrasive wear to a fantastic degree. 6. Under no circumstances can it be made to mildew or rot, and no marine growths of any kind can live on it because of the chlorine in the substance itself.

"Putting these things together, Ernest and I conceived the idea of coating duck and sailcloth with Koroseal. Sails made of this material will, apparently, live forever. It will resist abrasion. It will not mildew, and it will shed water like a duck. It will not catch fire. It will reduce porosity to zero. It will also be lighter and stronger, and more beautiful. It will cost 20 per cent to 25 per cent more than comparative grades of duck, and will obviously last five times as long."

\+ + +

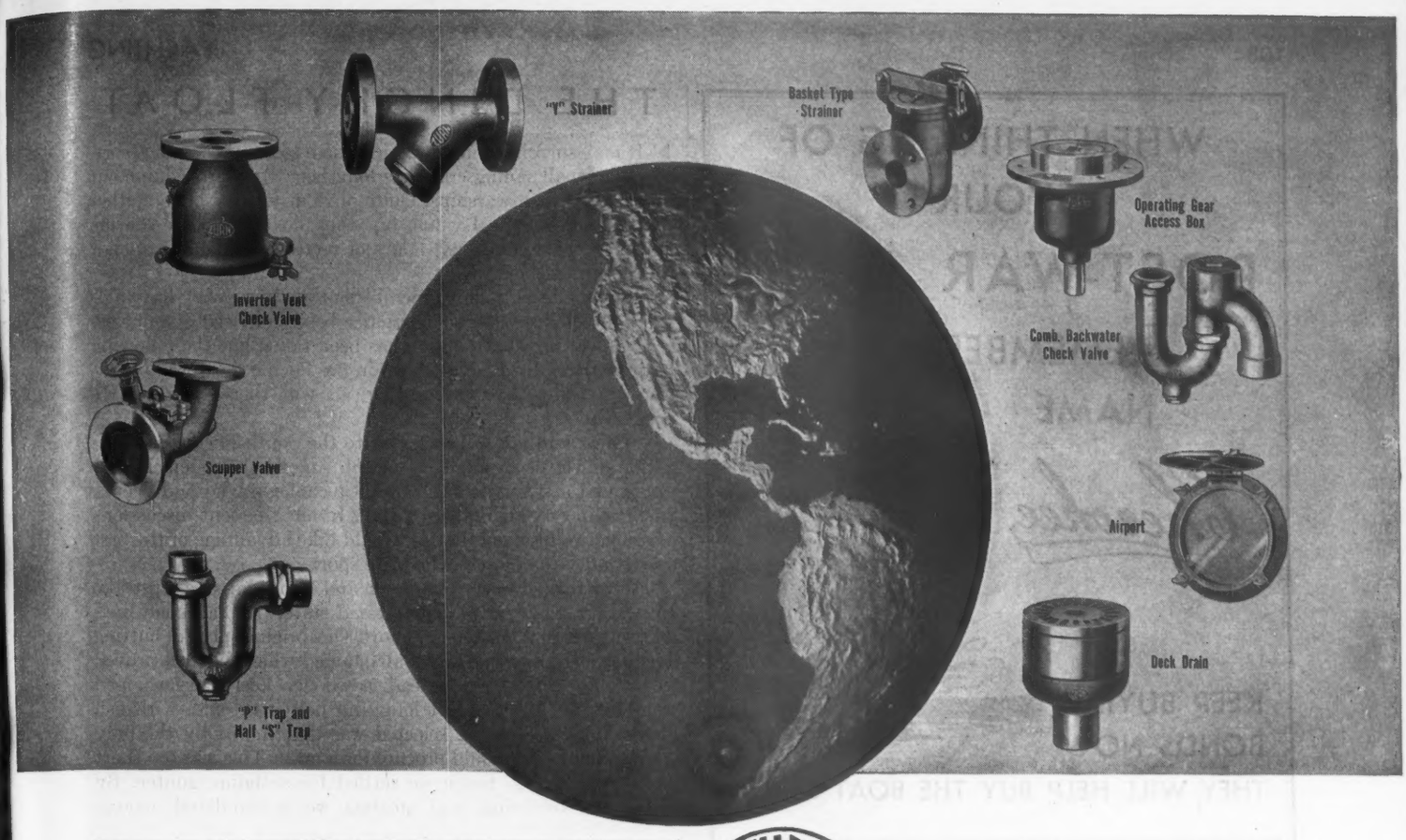
And that, ladies and gentlemen, is a digest of the comments and ideas which YACHTING has received to date on that most provocative of subjects — the post-war yacht. To endeavor to draw specific conclusions would be premature at the present writing; yet from the many ideas that have been expressed in the series comes, to the yachtsman, the most heartening assurance of all — that the nation's yacht designers, builders, and equipment manufacturers are using the war years not only to make a major contribution to the war effort, but to apply their ideas, knowledge and experience to the yachts that will be afloat when the peace is won.

UNDER THE LEE OF THE LONGBOAT

(Continued from page 64)

was the only yacht to finish the 130-mile Cornfield Lightship Race, which was sailed in particularly heavy weather." Blast my eyes! *Hotspur* took part in that race. Aboard her with me was Bunny Rigg, who is now fighting with the amphibs overseas; Phil LeBoutillier, who progressed from there to fame and glory with his almost unbeatable *Stormy Weather;* my cousin Paul Squibb, who had sailed to Panama with me in *Hippocampus* in 1921, and my oldest son, who was then eight years old. And we weren't any of us quitters. Although the race was indeed sailed in heavy weather, which ripped our mainsail from luff to leach and delayed us three hours while we sewed it up, *Hotspur* finished second. She finished less than two hours after the cutter *Narwhal* and only an hour behind her larger competitor on corrected time. And got a handsome silver prize to prove it. If you were interested in sailing at that time — and I doubt that "Starboard Tack" was — you read all about the famous race in the November, 1931, issue of this magazine under the title *Sewing Our Way to Cornfield.*

There *was* a race in '31, sailed in not so very heavy weather, in which a boat was the only one to finish in her class. The others dropped out because their owners *thought* the weather was heavy. That was the Philadelphia Corinthian Yacht Club's race from New London to Cape May. Yep. *Hotspur* is the boat that finished in Class C. Quaint Cape May. It used to be a place that you raced to once in four years or holed in at if bad weather overtook you on your passage south. You used to walk a mile-and-a-half for your steak and groceries and the same mile-and-a-half back to your boat. And then, having seen Cape May, you shoved around the point inside Prissy Wicks Shoal, motored up the Delaware, and so slipped through the C. and D. Canal to the Chesapeake. Cool Cape May, twenty miles at sea! I wonder what has happened to it since the war stopped coastwise sailing.



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THE DINGHY FLOAT

▶ It may surprise American yachtsmen to know that an assortment of small sailing craft has long been standard equipment on many British warships. Quite obviously, they have neither tactical nor logistical value, but they do provide the officers and crew with occasional hours of recreation when at anchor in peaceful harbors.

Many yachting minded members of our own Navy have agitated in behalf of a similar practice being followed on our vessels. As yet no official action has been taken but the following letter, written by a naval officer in the Pacific theater of operations, indicates that "where there's a will, there's a way." He goes on to say:

"Some months ago I was sent to the South Pacific as navigation officer of an auxiliary vessel. Among the bluejackets, I discovered a kindred soul, a radio technician who had been a yachtsman on San Francisco Bay. In our frequent discussions of sailing we resolved that we would take advantage of the first opportunity to enjoy our favorite sport.

"We managed to get possession and ownership of a lapstrake 15′ wherry. She was in a pretty sad state, but had good lines and was worth a conversion effort. Our original plan of cutting a centerboard slot had to be abandoned when the keel proved to be quite rotten, so, instead, a wooden keel was fashioned from a 2″ by 12″ five feet long and bolted through with fish plates inboard. The rig selected was determined by the only piece of lumber we could procure for a mast. This was too short for a marconi rig; hence we settled for a sliding gunter. By borrowing, bartering, and stealing we accumulated enough

Rosenfeld Photo

A model of the new 14-foot sailing dinghy from designs by Harry Hall, the plans of which were published in the January, '44 issue. She is being built for Ernest and Colin Ratsey

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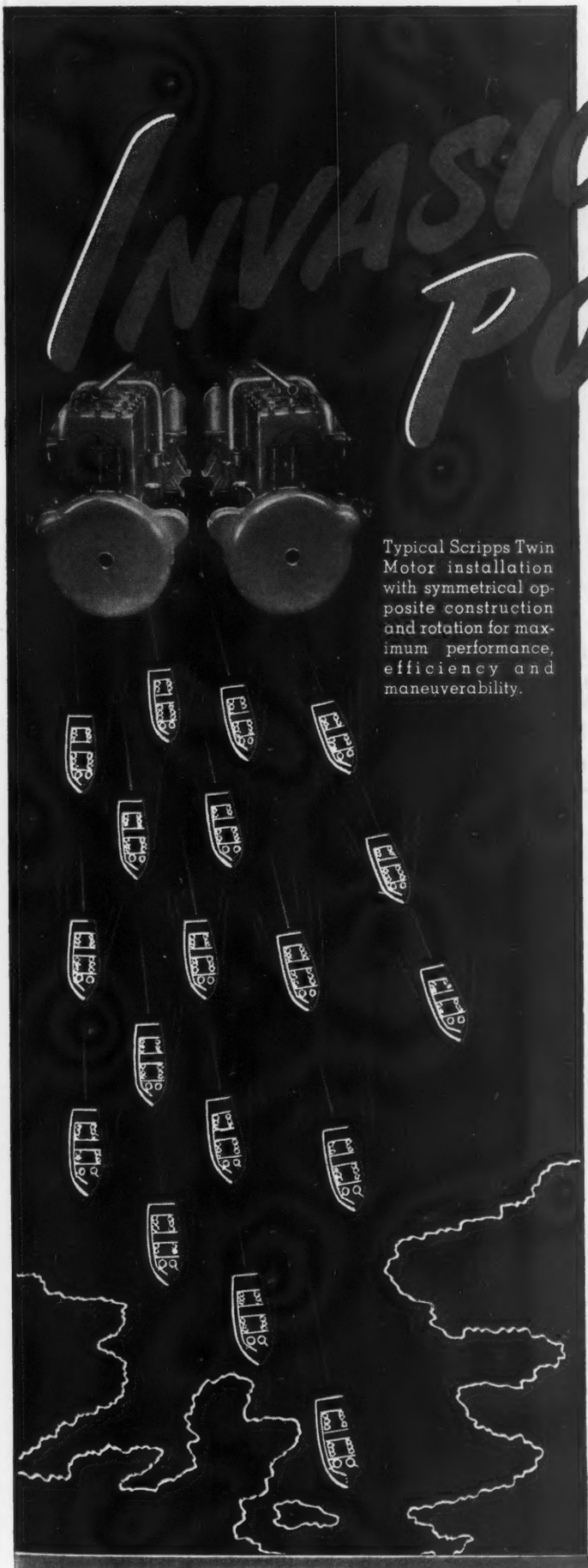

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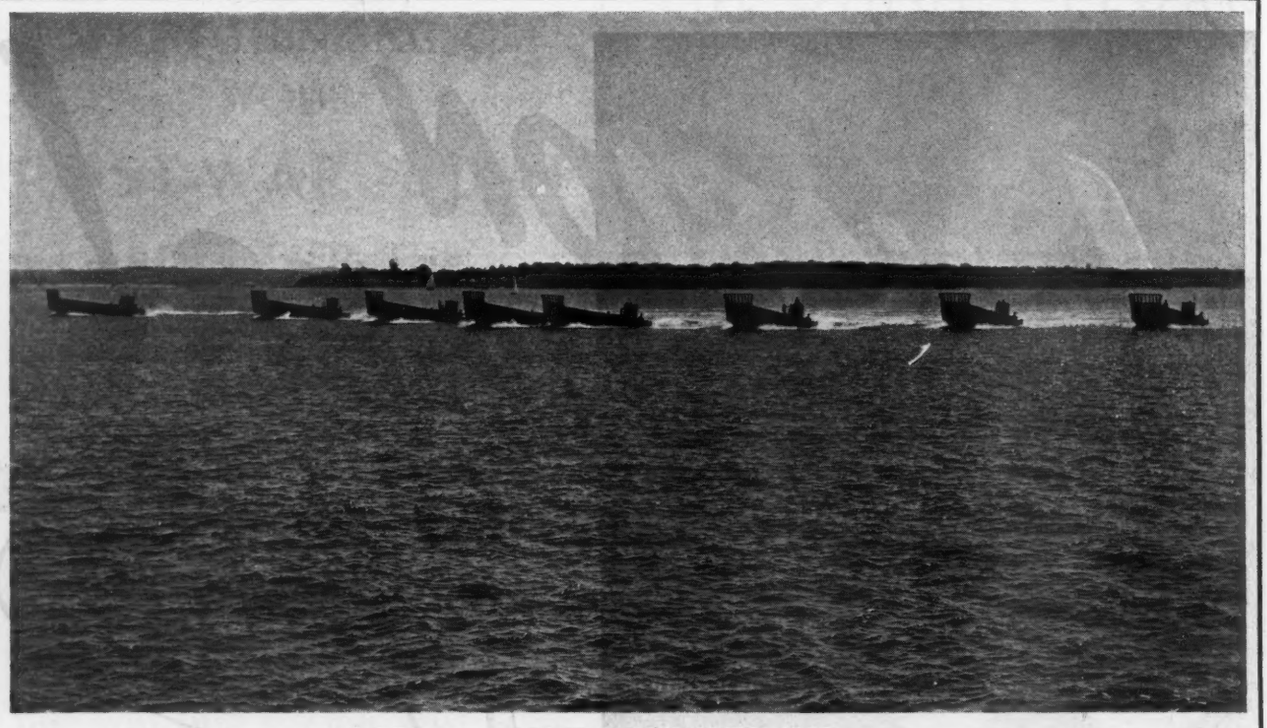

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INVASION LIGHTERS
CITY ISLAND BACK THE ATTACK — BUY BONDS NEW YORK

wire, hardware, and canvas to complete the job. The radio technician designed and manufactured all fittings for the gooseneck, blocks, rudder, etc., and they were very ingenious.

"The sail presented a difficult problem, as no one on board had had any experience in laying out a sail or in hand sewing. One of the quartermasters became quite enthusiastic as the wherry began to take shape, and, opportunely, a ship anchored near us on which he had served during the last war. He remembered having stowed away, some twenty-four years previous, a little hurdy-gurdy sewing machine. Incredible as it seems, he found that the little machine was just where he had stowed it. By devious methods known only to old-timers, it soon was aboard our ship! The canvas was cut and sewn with bright scarlet thread, batten pockets added, head board inserted, grommets sewn by hand, and we were ready to go.

"These activities had consumed the better part of two months as, of necessity, they were extra-curricular and we had visited several harbors before the conversion was completed. The wait was worth it, as she was a complete success in sailing qualities, although the crew were kept pretty busy bailing. On a surprising number of ships the same idea had developed, perhaps due to the many ex-yachtsmen who are now in the Naval Reserve. As a consequence, we found plenty of competition and were quite proud of the fact that our 'backyard job' was able to shellac anything of comparable size with ease. Off the wind, the native outriggers could walk away, but on a triangular run, reach, and beat course, we could take them.

"Unfortunately the ship was subsequently lost, and when last I saw the wherry she was still undamaged and her deck-lashings had been cut. I like to imagine that she has drifted on to some beach where someone else may find pleasure in her."

▶ Newport Harbor and Los Angeles Y.C.s are hammering away at a series of challenge dinghy races, sailed weekly at N.H.Y.C. The series will last for three months and, with a third of the races completed, Newport Harbor holds a fair point lead. Skippers trade boats for each race and scoring is on the basis of the number of boats defeated. The Newport Harbor team consists of Barney Lehman, Tommy Webster, Ed Gurley, Bill Baxter, Bill Inslee, Humphrey Bogart and Prent Eulmor. Los Angeles team members are Walter Elliott, Johnny Swigart, Ken Davis, Dick Terkel, Peggy Slater, Howard Wright, and John Wells.

SAILS AND SAILMAKING

(Continued from page 51)

1685, when, by the Revocation of the Edict of Nantes, the French forced to flight well over a half million Huguenots, England, fortunately, became a refuge for some of the finest artisans on the continent, and among them also were many weavers. Perhaps the descendants of some of these persecuted people may have woven flaxen canvas for the sails that carried the British fleet to Trafalgar — the irony of fate. The wheel of history has turned a full turn and again populations are on the move. Who can tell what may be the consequences?

The connection between sailcloth and sea power was so close in the 17th Century that, in the year 1664, Pepys recorded in his famous Diary that "the King of France hath forbid any canvas to be carried out of his kingdom." . . . Obviously, Louis XIV wished to prevent England from using French canvas to expand either her navy or her merchant marine. The result of this policy was to encourage the growing of flax and the weaving of sailcloth in the British Isles, largely in Somerset where, from that day down to the present, the finest English canvas is made.

In ancient times, the making of canvas was a home industry. The flax was grown on the farm where the women spun it into yarn on primitive spinning wheels, and the cloth was woven on crude looms in sheds and outbuildings. Somersetshire was one of the principal weaving centers and here it was that many of the Flemish and French refugees had settled, as attested by the names which survive there to this day.

(To be continued)

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20 D-15 — In comparative tests this horn has proven superior to other types. Easy to install — compact — requires very small space. Waterproof. Has four oversize drain slots and heavy screen. Decibel rating approximately 120. Finished in black enamel with two outside terminals. 6, 12, 24 volt. Height 6⅝ in.; width 5¼ in.; weight 3¼ lbs.

H-4 — New marine type horn. Produces a signal of high intensity: approx. output of 95 decibels. Splash proof construction. Ruggedly built to withstand shock test of 2,000 foot pounds. Case and trumpet made of drawn steel finished in battleship gray. 115 volt A.C. Width overall 5¼ in.; diameter 8-1/16 in.; length 7¾ in.; weight 10 lbs.

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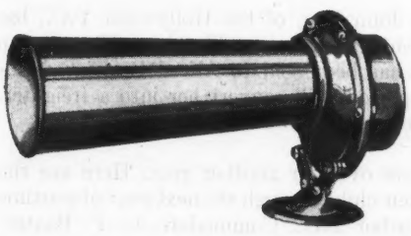
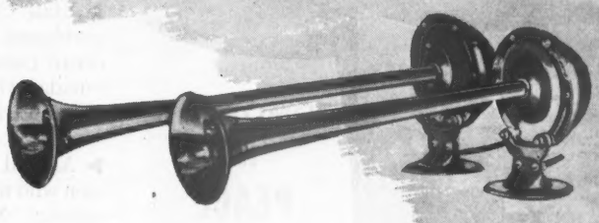
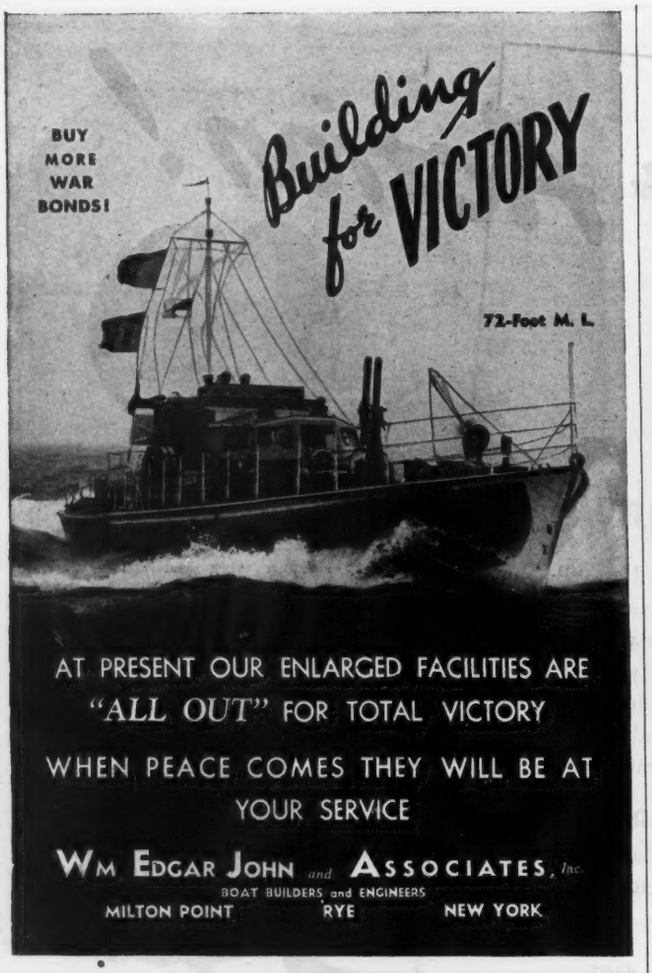


118 B — Powerful, single tone, electrically operated marine horn. Rugged, low pitched, signal blast audible at great distances. Made of steel with corrosion resistant operating parts. 6, 12, 24 or 32 volt. Height 7¼ in.; diameter 6⅛ in.; length 14½ in.; weight 6 lbs.



207—Precision made matched trumpets with rich tone that rolls the blended trumpet signal over the water for long distances. Furnished with individual mounting brackets, relay and hook-up wire. 6, 12, 32 volt. Length 19 in.; width 5⅛ in.; height 6¼ in.



News from Yachting Centers

WEST COAST BUBBLES

By Kent Hitchcock

▶ Ships for the Navy and for the Army's "navy" are flowing from California yacht builders' assembly lines in a constant stream. With prefabrication and mass production now an established routine, some builders are finding it possible to spare the man hours necessary for the construction of new fishing boats. The South Coast Co., at Newport Harbor, has two fishermen under construction, both designed by Edwin Monk, of Seattle. One is a 36′ V-bottom type utility boat, with power supplied by a Chrysler Royal. The 38-footer is a round bilge utility boat designed to carry 7 tons of fish and 6 tons of ice, with a cruising range of 600 miles. The Victory Shipbuilding Co., of Newport Harbor, is laying down a 112′ tuna clipper. North American Shipbuilding Corp. has completed the last of its government contracts and has begun work on the first of eight purse seiners for fishing interests in the San Pedro area. August Nordland is the naval architect. The Lowman Boat Co. is also through with government work and has laid down three of five 50′ tugs for a San Pedro construction company. Fellows and Stewart and the Wilmington Boat Works have each completed their first 86′ PRB for the Army. The two boats were launched at the same instant.

▶ Southland boatmen will be happy to hear that Waldo Drake, who conducted this column until 1940, when he was assigned to active duty with the Navy, has been promoted to a captaincy, the first fleet public relations officer to hold this rank. Waldo was assigned to the 11th Naval District, at Pearl Harbor, in mid-1941. Our heartiest congratulations to him.

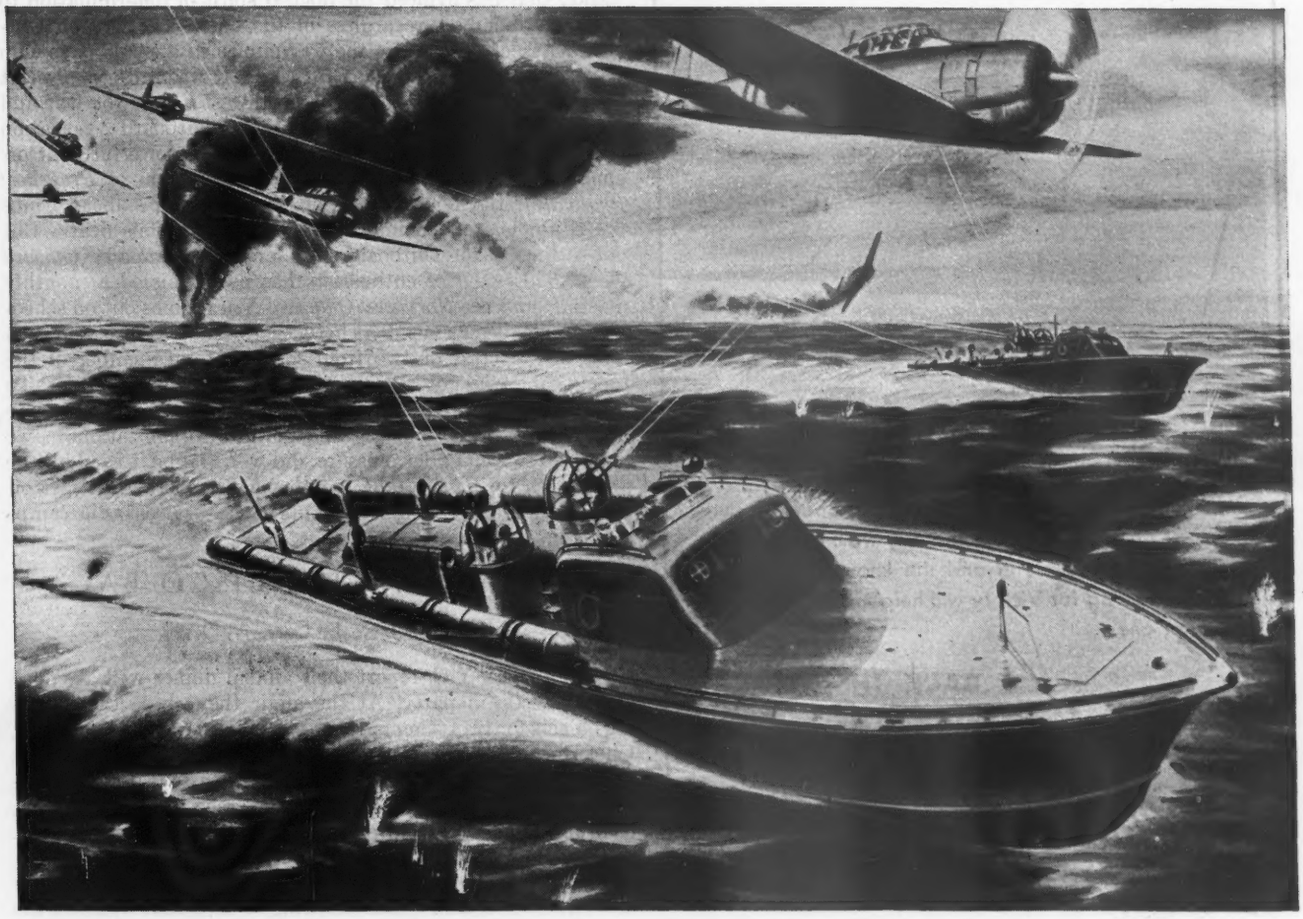
▶ A sad note comes with the announcement of the death of Ralph Lambert, well-known member of Ventura County, B.C. Ralph was a popular member of several speedboat associations; and, as driver of his little *Miss Ventura*, was always in the thick of the battle. He and his brother Clel, a pilot in the Army Air Corps, were killed when the plane in which they were flying from Fresno to Ventura crashed in the hills near Santa Barbara.

▶ Some of the veterans in outboard racing will remember a youngster named Ernie Ford, from San Diego. He raced a C Hydro named *Blue Nose* and, if memory serves, wound up a meteoric career with a win over the oldsters in that fast class at a Hearst Regatta. Ernie, now 26 years old, is a Lt. Col. in the Air Force and commanding officer of a base at Lincoln, Neb.

▶ Initial work on the ocean entrance and dredging of Alamitos Bay is under way and it appears that the dream of southland yachtsmen for a protected yacht harbor near the Long Beach area will be a reality after the war.

▶ Staff Commodore John Foy, of the Hollywood Y.C., has purchased Matt Walsh's classy cutter *Thorobred*. The veteran ocean racer *Mariner* has been sold to Alfred Brown, of Ensenada, who, it is reported, will convert her into a freighter. This note seems like the obituary of a fine lady.

▶ Annual elections are over for another year. Here are the men who will guide their clubs through the next year of wartime activity. Newport Harbor Y.C.: Commodore, C. F. Baxter; vice commodore, James L. Rubel; rear commodore, Henry Grandon. Balboa Y.C.: Commodore, Mark Healy; vice commodore, Donald W. Kemp; rear commodore, Robert L. Boyd. Cabrillo Beach Y.C.: Commodore, Kenneth Davis; vice commodore, Kenneth Groan; rear commodore, Gunnar Anderson. C. King Brugman was elected commander of the Los Angeles Power Squadron. King has just been reelected for the sixth time to the post of executive vice president of the A.P.B.A. and, in addition, is commodore of the Pacific Coast Y.A.



The Night Prowlers that turned into Daytime Sluggers

Place . . . The far Pacific

Time . . . Just after dawn on a clear day

Two of the Navy's swift PT boats are cruising home from night patrol duty.

Suddenly *thirty* Jap planes roar in overhead and start to peel off. Immediately the PT's begin twisting and turning at high speed. And the PT crews hold their fire until the Japs swoop down.

It was *then* the Japs discovered that the little PT's were alive with an unsuspected sting. The ack-ack fire of the PT crews was deadly. Four Nip pilots hit the waves. It was too hot for the other twenty-six. They turned and high-tailed for home.

Thus the PT boats wrote a new entry in their battle record—as hard-hitting *daytime* fighters.

All PT boats are powered by *Packard marine engines*—three to a boat—and supercharged for extra power. It is these engines that give the PT speed and maneuverability—that let it spin on a dime—that make it such a tough target to hit.

This Packard marine engine is an aircraft-type power plant built to the same exacting precision standards as the Packard-built Rolls-Royce aircraft engine.

Packard craftsmen know, of course, that these PT-boat engines alone won't win the war. But they're building them as *fast*, and as *painstakingly*, as if they thought they would.

And from this rich experience in building superb wartime engines, we are learning new precision methods and techniques that will someday enable us to offer you *peacetime* Packard engines even finer than those we've built in the past.

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WARHAWK fighter

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PRECISION-BUILT POWER

LANCASTER bomber

MOSQUITO fighter-bomber

NAVY PT boats

SEA TAXIS

by Palmer Scott

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DEEP RIVER, CONNECTICUT

▶ Throughout the world of speedboating there is one organization that has evinced the dogged spirit of determination to serve its members regardless of the odds. The Oregon Outboard Association before the war published a single page club paper called *Northwest Outboard News*. It was full of real meat of the racing news of the great northwest. Came the war and the curtailment of racing. The National Outboard Association is now less active; the A.P.B.A., the most powerful boat organization in the world, suspended publication of *Propeller; Roostertail*, the house organ of Associated Speedboat Clubs (ye editor is staff commodore) died an inglorious death. But not so the Oregon Outboard Assn. and the *Northwest Outboard News*. This gang of enthusiasts has never missed a monthly meeting, and the *Northwest Outboard News* comes out on schedule. It is mailed to members here, there, and overseas, and each issue has a letter or two from some grateful member of the racing gang who got his copy in his assigned spot overseas. To the Oregon Outboard Assn., more power to you . . . and to the rest of us with our big and powerful organizations — we didn't do so well under pressure, did we? Maybe it wouldn't be a bad idea to get the gang together for a meeting and get off some news to those members of ours in the services in the camps and overseas.

FROM SAN FRANCISCO BAY

By Jesse L. Carr, M.D.

▶ The Aeolian Y.C. report their annual dinner well attended and a successful party. At the affair they chose the following officers for 1944: Commodore, Chas. Robie; vice commodore, Chet Hacke; port captain, Sig Hansen; secty., Russ Federspiel; financial secty., Bill Trask; treas., Geo. Russell; directors: ex-com., Smith, John Morris, Tom Bolger; race com.: Dan Miller, chairman, Harvey Godfredson, Dick Curran; historian, E. Johanson.

The week-end following, the Corinthian Y.C. held their dinner and elections, choosing the following to represent them for the year: Commodore, C. T. Struven; vice commodore, Kenneth Jones; port captain, Alex Gunther; treas., E. D. Howard; secty., James Nuckolls; directors: Gunnar Tornberg and Carl Warden.

▶ On the 27th of January, the Sequoia Y.C., Palo Alto Y.C., Coyote Point Y.C., and South Bay Y.C., which form the quartet of South Bay clubs, held a joint meeting, outlining policies for 1944. In addition to a preliminary arrangement for regattas, they elected to change the format of their bulletin and in it intend to include a swap chest similar to that instituted by YACHTING several years ago.

▶ Coyote Point Y.C.'s officers will be: commodore, Lee Engel; vice commodore, Dr. Art Corbett; treas., Jerry Cook; secty., Jack Edwards; port captain, Emil Stein; directors: Andrew Byrd, Gus Barth, Ray Wilmore, Henry Ricci and Earl Burns.

▶ Most of the large boat construction in local boatyards is nearly completed and many are turning out small landing craft. Madden & Lewis Yard, at Sausalito, announced a contract for a number of Navy whaleboats. As yet no private yacht construction has begun. . . . DudleyMetteauer has sold his *Marquita* to Harry Green of the Sequoia Y.C. . . . William Langridge, of the Aeolian Club, has sold his motor cruiser *Josie* and plans to move up the San Joaquin River. . . . *Rhea* has been brought down from that locality by Mr. Papworth. . . . Paul Arens, who sold the *Lady Bess* to Mr. Winter some time ago, has sold the *Yo Ho Ho* (ex-*Naida*).

▶ Lt. Jim Michaels came north with his command a month or so ago. Lt. Com. John McCrea, of the Corinthian Club, arrived in San Francisco during the month. Jim Ford is in town after 20 months in the Pacific. Bob Hurst, who recently arrived back from the South Pacific, is at the Mine Warfare School, Yorktown, Va. Aldo Alisio was through San Francisco on his way to foreign service. Dennis Jordan, of the St. Francis Club, is somewhere in Africa, and Lt. H. H. Cunningham, of the same club, is now stationed in the South Pacific.

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How quickly these boats can be put into the hands of owners after the war will depend upon distribution as well as production. The Century dealer family, of which we are proud, will be further strengthened. There will be some changes, of course—to fill vacancies caused by the war, to extend Century representation and to improve Century service generally. At the right time we shall become active in this direction. Where new dealerships are necessary we shall contact you who have shown your interest by writing.

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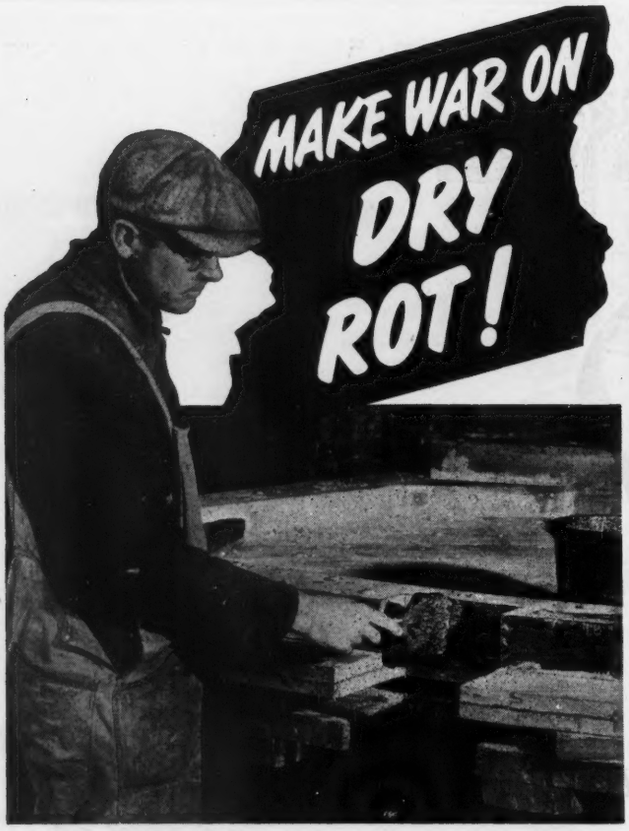

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AGENTS IN EVERY IMPORTANT PORT

▶ Officers for 1944 at the South Bay Y.C. will be A. G. Moore, commodore; Frank Filben, vice commodore; R. B. Engfer, secretary; Walter B. Jones, port captain. The new board of directors will be Manuel Mello, Marshall S. Hall and George Honore, Jr.

▶ At the Palo Alto Y.C. the following officers have been chosen: Commodore, Harry M. Barnes; vice commodore, Edward E. Hardy; port captain, Foree Chittenden; and treasurer, Mark Nesbit. Edward C. Thoits, Carl W. Johnson, and William Smith will be the directors.

DETROIT JOTTINGS

By George E. Van

▶ Life's log closed for Mason Pitman Rumney soon after 1944 had started on its course. Every yachting section has its outstanding men. "Mase" was an important man in the Detroit area and his yachting activities carried him beyond the Great Lakes. In 1934 he was with Russell Alger aboard *Baccarat* when the fresh-water cutter and crew won Class B honors in the race to Bermuda. And in 1938 he helped Harlow Davock bring the gaff-rigged schooner *Abenaki* in third in the fleet, behind *Stormy Weather* and *Sonny*, in the Havana-St. Pete Race. There were later races to Havana and also cruises through the Bahamas. The latter, he said, were merely warm-ups — the day would come when he'd go far over the horizons of the world. That trip isn't going into the log now; but the pages already written cover the sport as it is known in and around Detroit.

"Mase" was one of the great skippers of the old 21-footers and knew well *St. Clair*, *Otsiketa*, and *Camilla*. Later there were *Red Coat Barbette*, *Trident*, *Josephine*, *Royono*, *Baccarat*. He raced them as skipper and crew. He sailed in most of the Port Huron-Mackinac races, and won in the cruising class with Johnny Ford's *Royono* in 1937. He also was a frequent participant in the race up from Chicago. As the owner of the "R" boat *Lightning*, he won at the Interlake Regatta at Put-in Bay and for many years cleaned up in the class championships at Detroit.

He was 60 at the time of his death, which came after a year's lingering illness. Throughout his yachting life he was active at the Grosse Pointe Club, which was known as the Grosse Pointe Country Club earlier in the century.

▶ BILGEWASH: Milt Powers, skipper of the "C" sloop, *Nancy Lee*, is the new Detroit B.C. commodore. He started his yachting life on Lake Michigan at Chicago. . . . Incidentally the Boat Club is giving evidence of staying in business by celebrating its 105th birthday. It was the first rowing club in America (1839). They weren't rowing at either Harvard or Yale when the boys were pulling the sweeps on the Detroit river. . . . John Edgar Duncan has bought the champion Six-Metre *Noreg* from Gordie Saunders. . . . K. R. Jorgensen has renamed the 51′ cutter *Polly* which he bought from Henry Nevins last fall, *White Heather*. . . . Buell Doelle writes that Tom Gannon and Carl Petersen are re-building the eight club-owned catboats at the Detroit B.C. . . . Somewhere in the Southwest Pacific Norbert Taylor of Toot Gmeiner's *Apache* crew passed Freddie Jensen, an ace catboat skipper. They hadn't seen each other in more than two years, but the first thing they said almost in the same breath, "Have you heard . . . there are six Eight-Metres in Detroit now." . . . Dr. R. D. Ament announces that the Detroit Y.C. hopes to hold its first catboat races, April 8. . . . Ed Campbell, the handsome down-river man of the Grosse Ile Y.C. is succeeding E. C. Balch of the B.C. as the commodore of the Detroit River Y.A. . . . The D.R.Y.A. missed its first fall meeting in 27 years . . . then someone discovered that Secretary Bill Nagel had gone into service. . . . Lou Provencher of the Edison B.C. is now keeping the outfit going.

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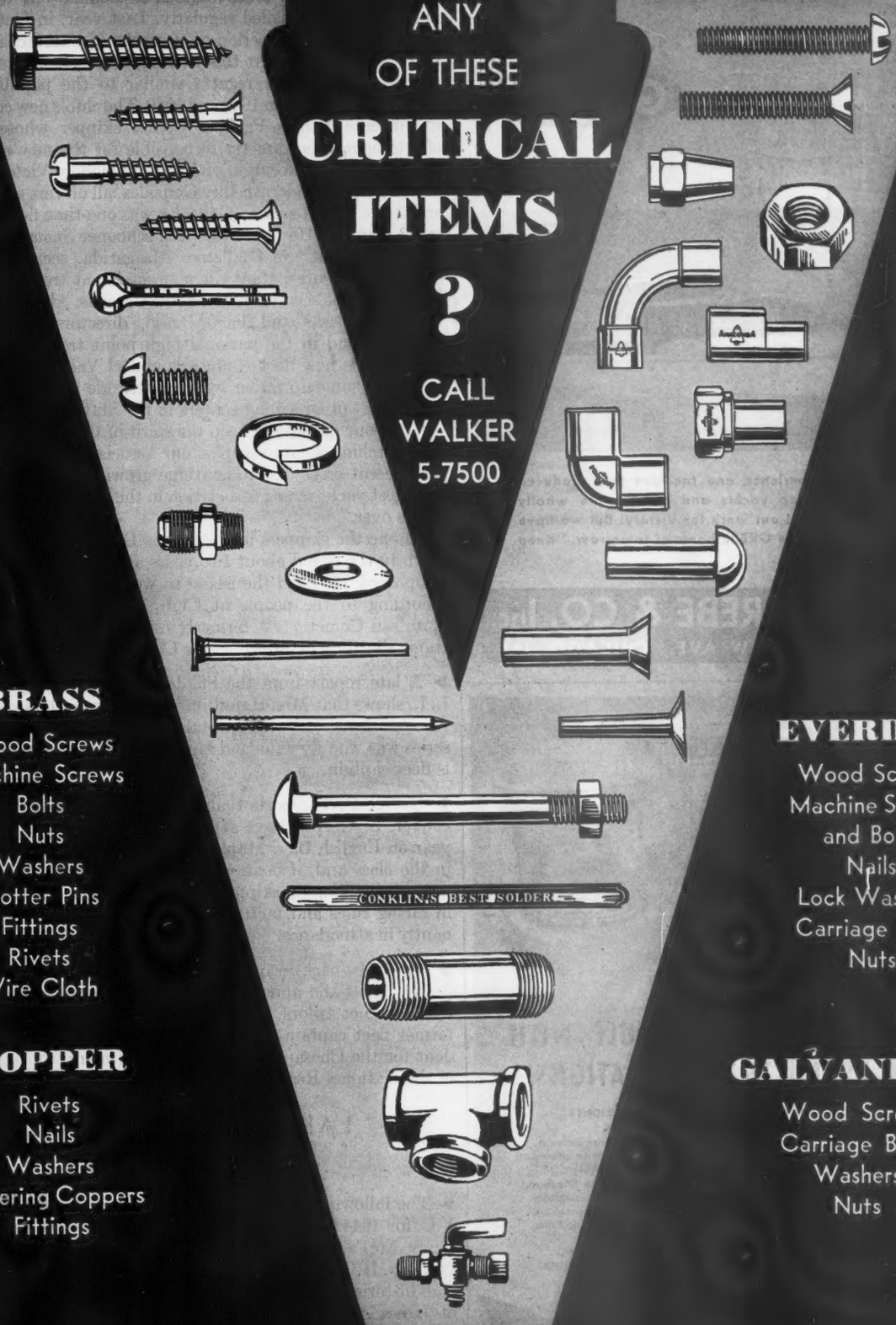

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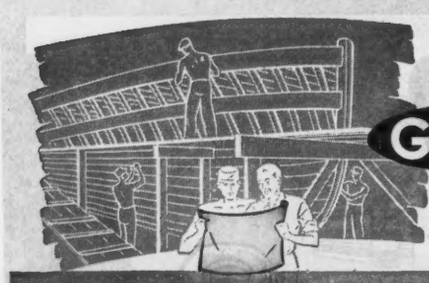

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COMET COMMENTS

By Malcolm D. Lamborne, Jr.

▶ Comets are booming again in San Juan, Puerto Rico, with the Club Nautico de San Juan the center of activity rivalling pre-war days. The total number of Comets has reached 18, and all are being sailed regularly. Last year, in fact, the fleet staged 36 races in a period of 50 weeks (no winter layup down there, skipper). And at this writing, sailors there were staging a special mid-winter regatta similar to the popular Don Q Trophy events held in 1939 and 1940. The club's new commodore is Vincente Balbas Pena, a Comet skipper whose personal efforts have been directly responsible for the new enthusiasm there. With the exception of Vice Commodore Victor Braegger and Rear Commodore Teddy Gonzalez, all officers and directors are active Comet sailors. Gonzalez was one-time fleet champion in his *Arcoiris*. He also owned the schooner *Snow White*.

Other officers are Guillermo Margarida, secretary; Hector Sanchez, treasurer; Raul Guzman, assistant treasurer; Charlie Noa, assistant secretary, and Mike Casellas, Alfonso Del Valle, Gabriel Espasas and Paco Bueso, directors. Sanchez, who placed second in the national high point trophy competition last year, is new fleet captain, and Del Valle, fleet secretary. Del Valle sums up rather well the attitude in Puerto Rico and we hope at other sailing centers in the States. He writes:

"It is our purpose to keep the spirit of the Comet Class alive and marching on, thus helping our Association to stand through the present crisis and to continue growing as the biggest and strongest yacht racing association in the world — as soon as the war is over."

Among the skippers in the fleet is Dick Bertram, who sailed down to the island about two years ago from New York in his sloop *Sora*. He liked the island so well, he decided to stay on, according to the people at Club Nautico. He and his wife Kate sail Comet *1112*, formerly owned by Espasas. The Bertrams shortly will launch a new Comet.

▶ A late report from the St. James Comet fleet, St. James, L. I., shows that Mrs. Hamilton F. Potter won the season championship last year with a total of 26 races sailed. The junior series was won by Jane and Helen Coleman. Philip G. Bartlett is fleet captain.

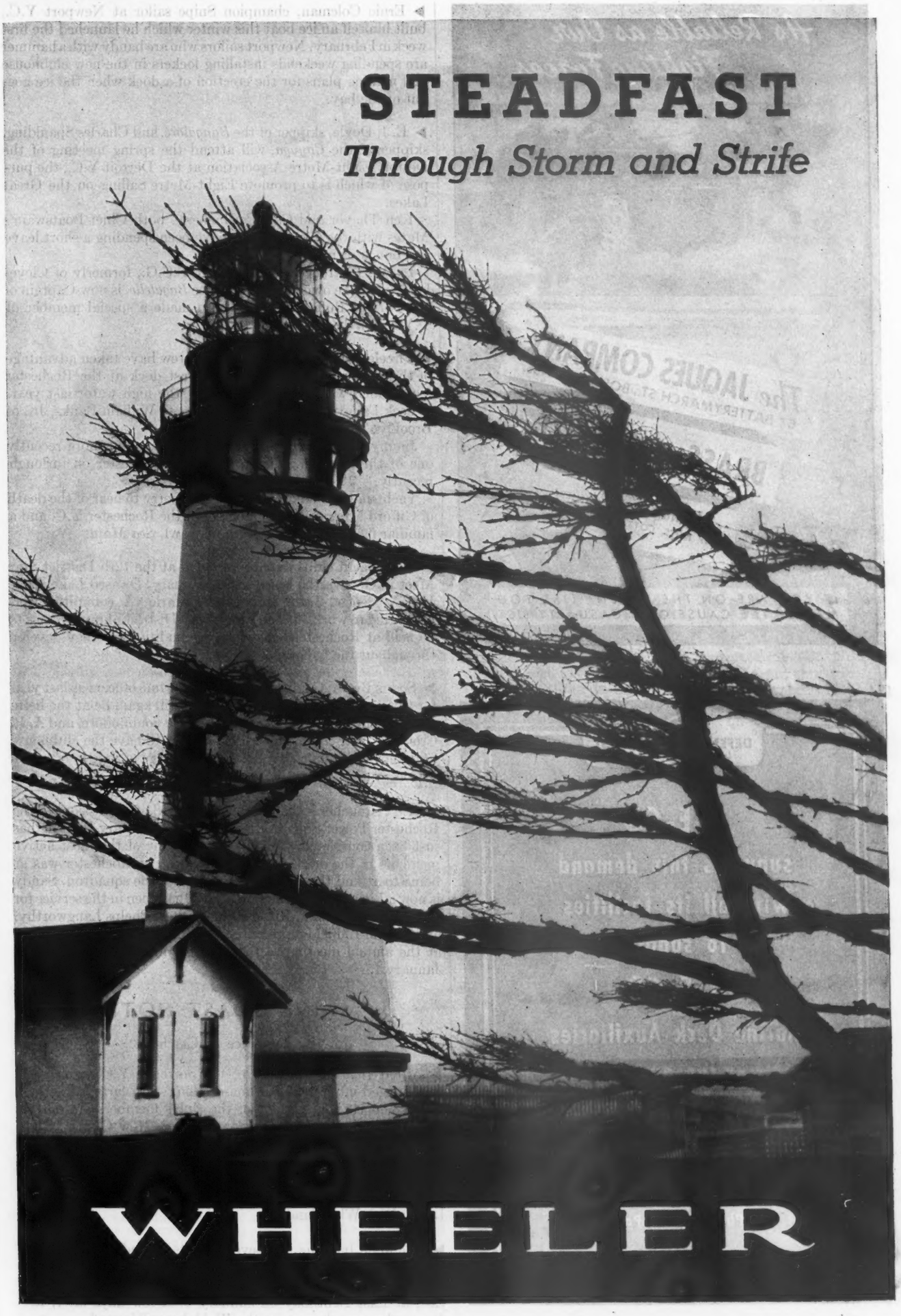
▶ George Potts reports that the Royal Vancouver Y.C., Vancouver, B. C., will have at least two new Comets sailing this year on English Bay. Maple Bay Y.C. also is showing interest in the class and, if boats can be found or built, there are six prospective Comet skippers. Potts has been holding classes in racing rules and tactics at Nanaimo with juniors predominantly in attendance.

▶ The three-page document on duties of fleet officers, which was drawn up at the annual meeting in January, is worth study by all Comet sailors. Author of the paper is Col. Jack Jacobs, former fleet captain at Washington; later regional vice president for the Chesapeake Bay area, and many times secretary of the National Regatta Committee.

LAKE ONTARIO NEWS

By W. Peck Farley

▶ The following officers have been elected at Royal Canadian Y.C. for 1944: Commodore, James E. Hahn; vice commodore, Percy McFarlane; rear commodore, R.B.F. Barr; fleet captain, Dr. H. K. Detwiler; honorary treasurer, C. S. Hamilton; club historian, C. H. Snider. The sailing committee is composed of James A. Hyland, E. G. Sorsoleil, W. G. Windeyer, J. W. Medland and J. S. Wright. Four hundred and twenty-two R.C.Y.C. are away in the three fighting services and eight have already given their lives for their country. James Hahn, new commodore, isn't sure when he'll see his commodore's flag aloft as due to pressure of war work he has not commissioned *Nonchalant* for the past five years. Bobby Grant, former skipper of the 8-Metre *Invader*, has recovered from his broken back and has rejoined his tank unit.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▶ Ernie Coleman, champion Snipe sailor at Newport Y.C., built himself an ice boat this winter which he launched the first week in February. Newport sailors who are handy with a hammer are spending weekends installing lockers in the new clubhouse and making plans for the erection of a dock when the ice goes out of the bay.

▶ E. J. Doyle, skipper of the *Bangalore*, and Charles Spaulding, skipper of the *Cayuga*, will attend the spring meeting of the Detroit Eight-Metre Association at the Detroit Y.C., the purpose of which is to promote Eight-Metre Sailing on the Great Lakes.

Ken Thayer and Carl E. Haeberle, both Chief Boatswain's Mates with the Coast Guard, have been spending a short leave in Youngstown.

Lt. W. Lawrence Jones of the U.S.C.G., formerly of Cleveland, where he owned and sailed the *Bagatelle*, is now Captain of the Port of Buffalo and has been made a special member of Y.Y.C. for the duration.

▶ Greeley Strickland and his yard crew have taken advantage of the open winter to rebuild the west dock at the Rochester Y.C. which was badly damaged by the high water last year.

Peck Farley has sold his Star *Deuce* to William Banks, Jr., of Brooklyn, N. Y.

Jimmy Rappenacher, former Star sailor and more recently one of the crew on a flat top, was in Rochester on furlough recently.

Yachtsmen on Lake Ontario will be sorry to hear of the death of Gifford Morgan, long a member of the Rochester Y.C. and a familiar figure at regattas with his yawl, *Sea Maid*.

▶ Four yacht clubs were represented at the 12th District Star Meet in Geneva the last week in January: Owasco Lake, Lake Keuka, Seneca Lake and Lake Ontario. A committee was appointed to work out plans for a 12th District Skipper Series to be held at Rochester depending on conditions as they develop throughout the balance of the year.

▶ Sodus Bay Y.C. is carrying over the same officers as last year for the current season. Paul Emerson will again be at the helm as commodore, with Don Welch as vice commodore, and A. P. Croucher, rear commodore. They expect to have the clubhouse fully repaired from last year's storm damage in time to open the season.

▶ A. P. Croucher is chairman of the Board of Admissions of the Rochester Power Squadron. A class in Elementary Piloting has just been completed. "Sandy" Beach, one of the most active members in the original Power Squadron at Rochester was at home to attend the December meeting of the squadron. Sandy is now a Lieutenant in the U. S. Navy; has been in the service for the past two years. F. Ritter Shumway, E. Phelps Langworthy, and Harold L. Field represented the Rochester Power Squadron at the annual meeting of the U.S.P.S. in New York City on January 15.

MAINE COAST NOTES

By Lawrence B. Getchell

▶ Alfred Ingalls, secretary of the Sorrento Y.C., which the war slugged into an almost non-existent state early in the first round, reports that twenty of the club's members are now in the armed forces, scattered from Italy to New Guinea. They are: Bob and Dick Loomis; Jim and Ed Gamble; Dr. Francis Chafee; John Chafee, Jr.; Janet Chafee; Gifford and Murray Ewing; Newbold, Crosby, and Tom Noyes; Tommie Stone; Jim and Dan Boyd; Sam Tilden; Helen and Bob Lewis; Francis Lobel; Dick Wheatland.

▶ The main building and several boats, including the old 79' river steamer *Virginia*, which was being converted to a fishing vessel, were destroyed in a fire which swept the Goudy & Stevens yard at East Boothbay on January 9. A few days later, fire damaged a new dragger in the Waldoboro Shipyard.

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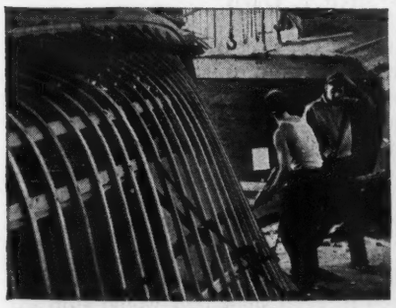

REALLY RUGGED: Look at the close spacing of those thick frames! That's typical Owens construction. With such features as white oak frames, mahogany planking and Everdur bronze screws, she's safe and seaworthy in any sea. Yet she only draws 2'3", enabling you to fish shallow waters. Whether it's tarpon or gudgeons, you'll get 'em with an Owens!

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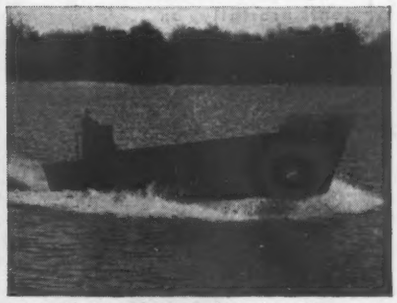

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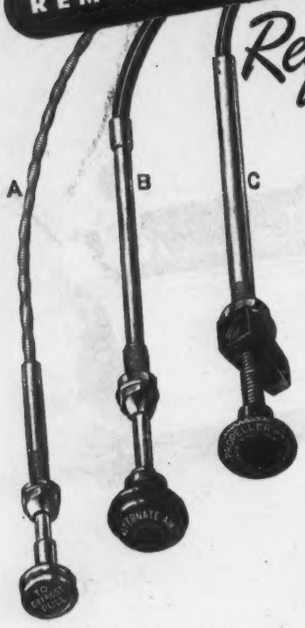

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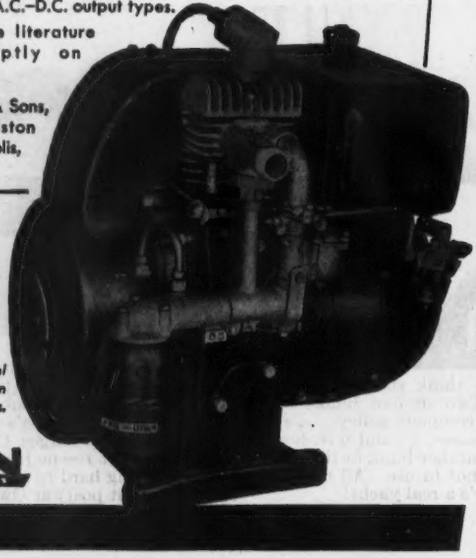

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▶ Col. Tudor Gardiner, USA, Cruising Club member and former Governor of Maine, was awarded the Legion of Merit for his part in that daring dash to Rome mentioned elsewhere in the November issue of YACHTING. He already held the Silver Star, the Air Medal and the Legion of Honor.

New skipper of the Naval Section Base at Bar Harbor is Comdr. Alexander W. Moffat, USNR, who relieved an equally ardent yachtsman, Lt. Comdr. Henry E. Kingman.

▶ Capt. Tom Will Cook, unofficial commodore of the Quoddy fishing fleet, who brought the first trip of sardine herring into Lubec in 1875, has swallowed the anchor at last. One of the best known and best liked skippers on the Bay of Fundy, Capt. Cook readily admits to being 83 years old — indicating that he was a full-fledged fisherman at 14. His last vessel was the *Startle*.

▶ The motor cruiser *Carmaret* has been purchased by Harvard Beal, of Southwest Harbor, from H. Blaine Davis, rear commodore of the Ellsworth Y.C. Bruce Potter, also of Sou'west, has sold his 10-Metre *Charlotte* to Frank Harding, of Belmont, Mass.

▶ A vivid illustration of the extent to which Down East windjammer fleets have diminished is found in the latest annual report of Captain Wentworth Freese, Harbor Master for the port of Bangor. At the turn of the century, Bangor counted its yearly arrivals and departures of sailing vessels by the thousands. But in 1943, according to Cap'n Freese's report, not a single schooner was numbered among the 163 sea-going vessels which entered the waters under his jurisdiction. Thirty-four schooners arrived in Bangor in 1942.

▶ Lobsters, those delicious Crustacea caught in wooden traps tied to umpty fathoms of slippery line (in case you've never pulled someone's — remember?) ought to be more plentiful some day as a result of the $40,000 lobster rearing station slated for construction at Lamoine by the Maine Sea and Shore Fisheries Commission.

▶ Frank L. Sample, Jr., Inc., will build a 96′ dragger for Capt. Michael Smith, of New Bedford, Mass. Reed Brothers, also of Boothbay, will build a 95-footer for Capt. Philip Filetto, of Gloucester.

At Thomaston, an 85′ dragger is building in the Newbert & Wallace yard for Joseph Dolan, of Guilford, Conn. She's designed by Albert Condon. Capt. Ernest Murley, of Fairhaven, Mass., is having a 77′ vessel built by Morse Boatbuilding Co.

Currently building at the Southwest Boat Corp., besides Government boats, are a 70′ sardine smack for Ralph K. Barter, of Stonington, and two 60′ draggers to the builder's designs. The yard is also altering the Peacock Canning Company's smack *Seawanhaka* to a West Coast type seiner.

LAKE MICHIGAN BREEZES

By Warren T. Davis

▶ From upon Green Bay comes a letter from Roger Williams, saying in part, "Have been doing a lot of ice boating here last three week-ends. The ice is perfect — even the old timers can't recall conditions so perfect."

Green Bay, as you know, usually freezes over each winter and cars can be driven across from Door County to Marinette and Menominee. Fishing through the ice is a business, and many exciting stories are told of the breaking up of the ice. In the old days the fishermen used sail sleighs to go to their fish shacks. These sleighs, some of which are still to be found in the lofts of fishermen's barns, could go through snow that would stop an ice boat. A few years ago your correspondent had the pleasure of sailing one which was about six and a half feet long with a beam of about three feet. It was a sled standing about eight inches off the ice, the top being sided in, with handles at the stern such as seen on dog sleds. The mast was about one-third of the way aft, and she had a square sail rig.

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is rigged somewhat fore and aft, and as the forward edge of the sail is trimmed down, the sleigh comes into the wind. As the forward edge of the sail is raised, the sleigh falls off. Fast and tricky, the sled will carry quite a load, with the skipper on a board sticking out to windward. These sleighs will go over crusty snow or through small drifts at a good turn of speed and can be piled up on beam ends if the skipper isn't on the job for strong puffs of wind or cracks in the ice. Green Bay should be visited by more yachtsmen in the winter!

▶ The M & M Y.C. recently elected Arthur Hanson, owner of the Tumlaren *Laki*, to the office of commodore, with L. E. Jones, vice commodore; Roger Williams, rear commodore; John L. DuBrucq, sec'y-treas. A committee has been formed to replan the course of the 100-mile race, the sportiest fresh water race in these parts. The old course has proved a bit too difficult in the past.

▶ Columbia Y.C. will be headed again by Willis C. Ware as commodore, with Al C. Wenzel, vice and Fred A. Thulin, rear commodore. Henry L. Kohn is secretary and E. S. Harris, treasurer.

▶ The Great Lakes Cruising Club has started its 8th school in navigation, and has enrolled more than 1129 "students."

Valiant, the Alden Coastwise formerly owned by C. J. Thiebeault, of Jackson Park Y.C., has been purchased by W. R. Smith, of Jackson Park, who intends to keep her active in racing during the 1944 season. *Eric V*, formerly owned by William L. Erickson, has been sold to J. A. Richter, of Jackson Park Y.C.

LONG ISLAND SOUNDINGS

By Starboard Tack

▶ There is a time in the life of man when everything happens at once. In the case of the Larchmont dinghy sailors that occurrence was a fiendish northwest puff which hit the fleet at the leeward mark during the second race on the afternoon of January 23rd. Thirteen boats had hit the starting line; a few seconds after that cyclonic moment, six of the original starters were overturned. Fortunately for all concerned, the consequences were not serious, but only because of an outstanding demonstration of cool heads (to say nothing of cooler torsos) and commendable seamanship by those both dunked and undunked.

How skippers Shields, Etchells, Olson, Reichart, Sutphen, et al. managed to retrieve their competitors was a miracle, particularly in view of the fact that the crash boat had pooped out and was heading rapidly for Lloyd's Harbor and points east. The latter was brought home with the aid of an observing CAP pilot (who must have been a yachtsman at heart), and because Drake Sparkman was the only person present who seemed to realize that you don't need a telephone number to call the Coast Guard. All's well that ends well, but there is — or should be — a moral to the tale. It seems to your correspondent that the time has come when Frostbite Dinghy committees should insist upon contestants wearing one or another kind of the new-type life preservers. The fact that some skippers don't think them necessary is, in terms of safety and common sense, a rather nonsensical consideration.

N.B. Some days later the Larchmont dinghy committee, in what can only be described as a masterpiece of understatement, rated the aforementioned panic party as "no race."

▶ The Coastwise Cruiser class enjoyed an excellent turnout at the annual winter meeting held at the New York Y.C. in January. Officers elected for 1944 were: A. Clarke Bedford, chairman; and Tom Closs, secretary-treasurer.

▶ Recent elections reported — Thames Y.C.: Commodore, John A. Connor; vice commodore, W. W. Meek; rear commodore, Oscar Kerman; treasurer, C. H. Dwinnell, Jr.; secretary, Gordon A. Beckwith. . . . Huguenot Y.C.: Commodore, Hobart W. R. Wheeler; vice commodore, Harlow W. Young; rear commodore, Robert H. O'Hair; secretary, Frank P. Bronson; treasurer, John R. Cornwall. The following appointments

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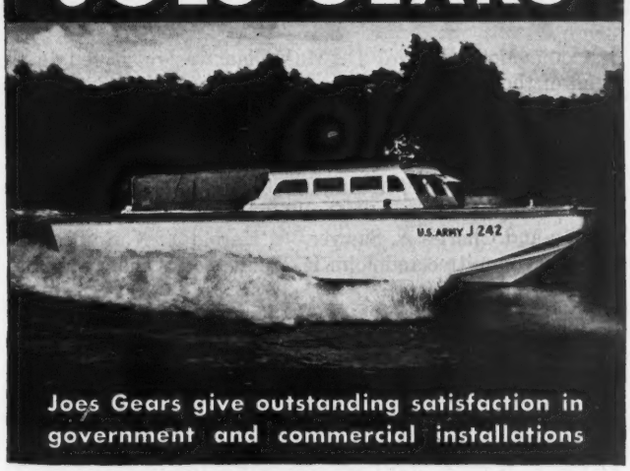

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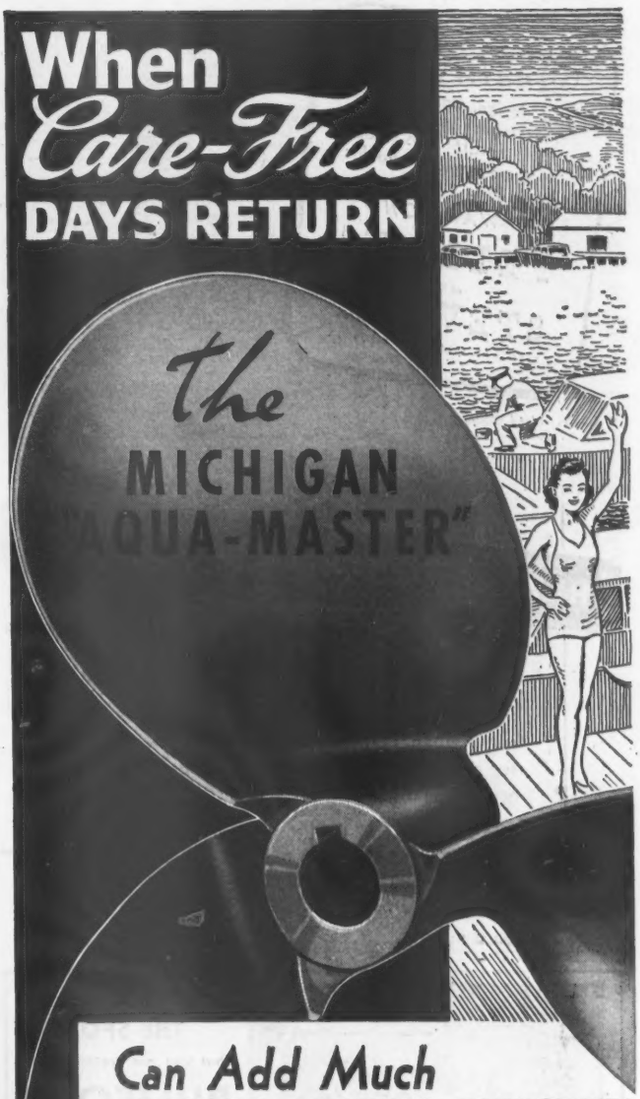

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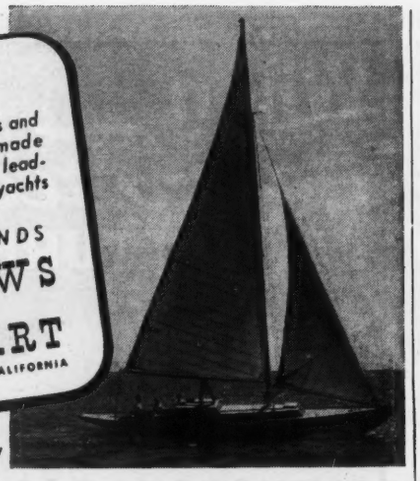

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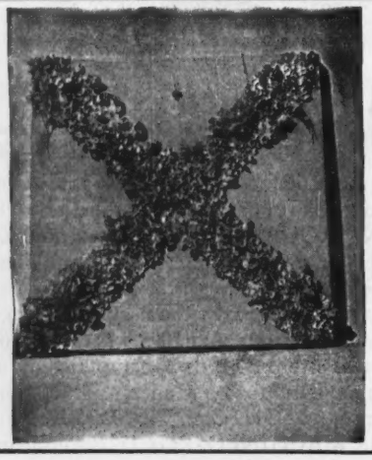

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were also made: fleet captain, Edward G. Buckenham; fleet chaplain, Rev. Dr. Elmer C. Elsea; fleet surgeon, Dr. Harold C. Ingraham; counselor, John A. Bodmer; measurer, Ralph A. D. Preston. Huguenot expects to operate its beach on Pea Island. . . . New officers of the Harlem Y.C. are: Commodore, William E. Rawls; vice commodore, Robert F. Shaw; rear commodore, Richard P. Vaughan; treasurer, Edward F. Studley; recording secretary, Thos. A. Guy; financial secretary, Dr. John M. Brophy.

▶ Wm. H. Stanley, of the Larchmont Y.C., has purchased Edward H. Maxwell's *Iris*, International No. 14, and will have her in competition during the coming season with Arthur Knapp, Jr., at the helm. . . .

▶ One of the highspots of President Arthur W. Page's report of Yacht Racing Association of L.I.S. was the following extract from the minutes: "Upon a motion duly made and seconded it was ordered that the thanks and appreciation of the Y.R.A. of L.I.S. be extended to Mr. Alexander P. Gest, Jr., Chairman, and to the other members of the Race Committee of the Larchmont Yacht Club for their services to Long Island Sound racing during the season of 1943."

▶ Long Island yachtsmen were saddened by word of the death of Lieut. Stanley K. Turner, Jr., USNR, who was killed in action while serving in the Pacific area. Lieut. Turner, who was twenty-five years of age, was communications officer on a warship at the time of his death. . . . Well-known in western Long Island yachting circles, Stanley Turner came into prominence when he won, with his lifetime friend Bob Bavier, Jr., the 1939 Atlantic Coast Star championship in *Migs*. Turner and Bavier were in the same class of officers to be graduated in June, 1941, from the Midshipmen's School at Northwestern University. He was the oldest member of the Junior Membership group of the Larchmont Y.C., and was a former commodore of that section. A resident of New Rochelle, he was an honor graduate of Taft school and attended Williams for three years.

MASSACHUSETTS BAY FLASHES

By Ed Earle

▶ Annual meetings have had the deck and there appears to be a bright future ahead for all clubs because of the lively interest shown in the sport. There is no doubt that the training and experience of yachtsmen played an important part when they were needed and this is being recognized as a fundamental part of the nation's war effort.

▶ Commodore Richard D. McMullan was re-elected to the helm of the Boston Y.C., New England's senior organization, at the 78th annual meeting held at the Rowe's Wharf Station. The other 1944 flag officers include vice commodore, Marquis S. Smith; rear commodore, Robert E. Dillon; secretary, Blake H. Cooley and treasurer, Arthur F. Wilband. The executive committee comprises Albert T. Gould, Gerald Harrison, Joseph W. Knapp and Charles A. Sawyer, Jr. Harold T. N. Smith heads the race committee and John R. Hunneman is chairman of the membership committee.

▶ The Corinthian Y.C. re-elected last year's officers: Commodore, Frederick J. Shepard, Jr.; vice commodore, George M. Stevens; rear commodore, Richard D. Seamans; secretary, Myron R. Hutchinson and treasurer, Frank J. McManus. The executive committee is made up of Harry N. Bloomfield and Daniel E. Watson, star helmsmen of the International and 30-Square Metre classes, respectively. The regatta committee comprises Frank P. Munro, Robert A. Leeson, Robert M. Fallon and Harold T. N. Smith.

▶ Francis P. Madden was re-elected to his fourth term as commodore of the Cottage Park Y.C., headquarters of Flotilla 412, Coast Guard Auxiliary. Other officers elected were Kenneth S. Magoon, commanding officer of the flotilla, as vice

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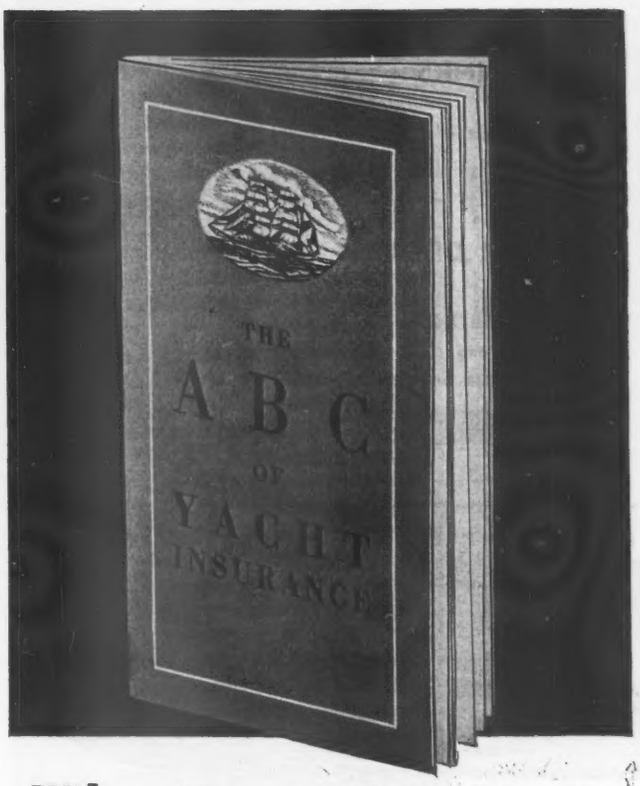

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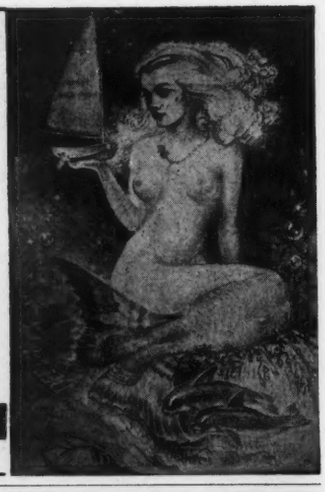

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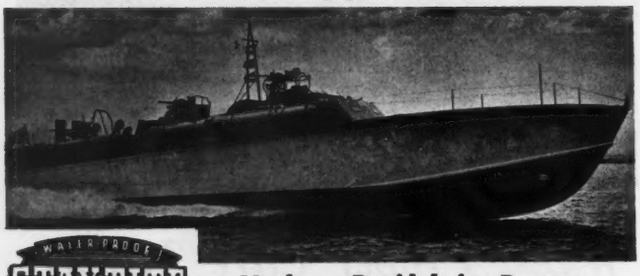

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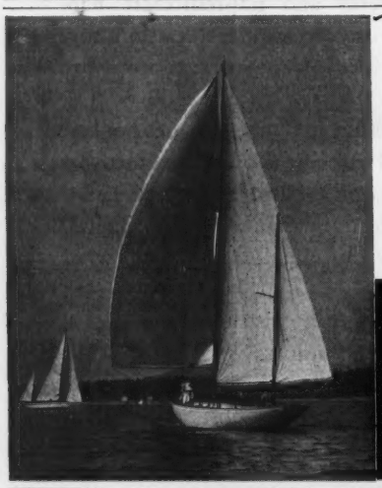

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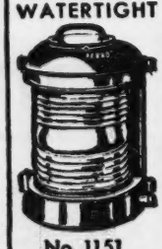

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commodore; and Roy W. Pigeon, treasurer. Francis V. Ward and Albert Dodson were elected directors for two years. The regatta committee includes Charles Nazro, Ralph Russell, William Cohan, Clayton Nickerson and Charles Cammall.

▶ C. S. "Cy" Young was elected commander of the Boston Power Squadrón at the January meeting held at the Hotel Kenmore, Boston, attended by 128 members. The other 1944 officers elected were: Lt. Commander, John S. Graham; First Lt., R. Perry Collins; Second Lts., Howard W. Lewis, Robert F. Shaw and Henry H. Fish; secretary, Oscar G. Wheeler; treasurer, Malcolm M. Russell. Bob Shaw arranged an instructive and entertaining program following the business meeting.

▶ The annual meeting of the Massachusetts Bay Y.C.A. was held at the Pleasant Park Y.C. The new officers include: Commodore, Thomas Sheehan, Squantum Y.C.; vice commodore, Thomas Moroney, South Boston Y.C.; rear commodore, Robert Fischer, United Shoe Machinery Y.C.; secretary, George O'Hara, Chelsea Y.C.; and treasurer, Norman Gray, Winthrop and South Boston Y.C. Harry Bernstein, Dorchester Y.C. and Ed Sharkey, Jeffries Y.C., were elected trustees. Reg Middleton, of the Point of Pines Y.C., installed the new officers. Commodore George Hamilton, chairman of the legislative committee, reviewed the work of the committee for the past year and what has been accomplished over the past twenty-five years. Representative John E. Powers, of the General Court of Massachusetts, the new commodore of the Columbia Y.C., gave an instructive discourse on post-war planning in reference to yachting affairs. Ed Gallagher, chairman of the Junior Yachtsmen's Committee, outlined the program for next season. All the newly elected commodores and re-elected commodores were introduced. Among them were Bill Sands, of Squantum, and Francis Madden, of Cottage Park, who are starting on their fourth term for their respective clubs.

▶ Yachting lost a fine sailor and the Nation, a gallant Naval officer when Lt.-Commander Parker C. Hatch, U.S.N.R., former Commodore of the Hingham Y.C., was lost in a sinking recently announced by the Navy. Commander Hatch served in the first World War as navigator on a destroyer. He was a member of the Cruising Club and owner of the schooner *Seaward*. A special meeting of the Hingham Y.C., honored his memory.

YACHTING ON THE NIAGARA FRONTIER

By Reginald H. Pegrum

▶ Up to the time of writing, the winter in this area has been unusually mild with a noticeable absence of snow. The ice in Lake Erie is light. It is reported that the ice in Abino Bay (Buffalo C.C.) is the lightest in the memory of most members. Let's hope this weather will continue and be a good omen of the boating season to come.

▶ Plans for the National Lightning regatta are under way. According to Gilbert R. Blehdon (commodore) and Ernest H. Holzworth (fleet captain) the Buffalo C.C. has offered to act as sponsor. Dwain E. (Buck) Weaver has been appointed regatta chairman. The National Lightning Class Association has tentatively selected the weekend of Sept. 9th for the event. It is expected that boats will be provided by the host club as in the past two years. Plans are afoot to obtain them and to guarantee perfect racing conditions. Some fifteen Lightnings are owned by Canoe Club members.

▶ It is rumored that Lt. Lawrence James, now at the Buffalo Coast Guard Base, will bring his Fisher's Island one-design from Toledo to Buffalo or Youngstown for the coming season.

▶ To Lt. James E. Daniels, the previous author of this column, the sailors of this area send their best wishes for success as a member of the Army's "Navy." We hope, Jim, that you will enjoy success in your new endeavors as great as you had in peacetime yachting. Good luck!!

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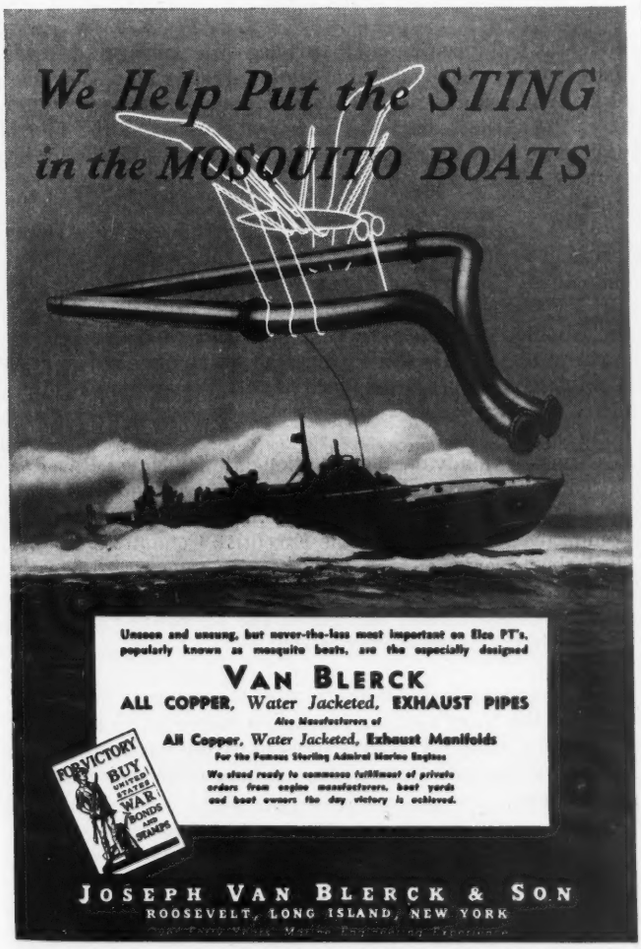

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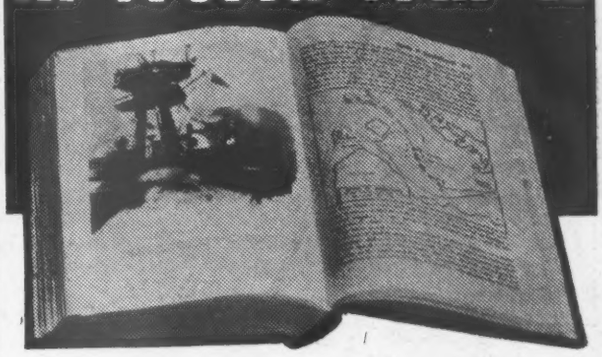

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ON COLLEGE CHARTS

By Leonard M. Fowle

▶ The Inter-Collegiate Y.R.A.'s Executive Committee has submitted to the member clubs a tentative schedule of spring events for their approval. Owing to the fact the Coast Guard and Naval Academies will hold their commencements probably on June 7, and examination periods must precede that date, this schedule of eleven regattas lists the major events, such as the Owen Trophy, Coast Guard Bowl, The American Trophy, and Morss Bowl, each a week earlier in the season than was anticipated in this column last month.

▶ However, the announced two week interval between these official Inter-Collegiate Y.R.A. championships has been preserved by scheduling the Owen Trophy (Easter Championship) for the weekend of April 22–23; the Coast Guard Academy Alumni Bowl (New England's) and The America Trophy (Middle Atlantic's) for May 6–7; and the Morss Memorial Trophy or I.C.Y.R.A. National Dinghy Championship on May 20–21. This is the latest date on which the Morss Trophy has yet been held in eight years of competition. The remaining details of the schedule are printed elsewhere in this issue; and although the dates are still tentative and subject to later changes, it is probably essentially the racing card which the I.C.Y.R.A. will sponsor this Spring.

▶ There is only one new event listed on this schedule at the present time. On the May 27–28 weekend, the Coast Guard Academy will sponsor a round-robin of dual team matches. The Coast Guard cadets will meet M.I.T. in the first round, as Harvard and Yale renew a dual meet rivalry which the war broke off following a Crimson victory on the Charles in the Fall of 1941. The two winning teams will meet in the second round as the losers also match sailing skill. A third round to complete the round-robin will be held if practical, but the event, which will probably be sailed in both dinghies and Stars, should make interesting racing in any event.

▶ It was with deep regret that college yachtsmen read in the February issue of the death of Butler Whiting, Jr., co-skipper of the Williams crew in the 1942 McMillan Cup finals at Oyster Bay. He is the second Williams yachtsman and the fourth prominent Inter-Collegiate Y.R.A. figure to give his life for his country in the present war.

▶ The Congressional Medal of Honor for heroic conduct as the pilot of a Flying Fortress on a volunteer photographic mission, June 16, 1943, has been bestowed on Major Jay Zeamer, Jr., M.I.T. '40. Young Zeamer was a contemporary of such skippers as "Runnie" Colie and Eric Olsen at Tech; while he made few appearances in intercollegiate regattas yet he frequently served as an official at such events held at M.I.T. and was an enthusiastic dinghy sailor.

▶ Owing to an advanced graduation date for Naval R.O.T.C. students, Commodore L. Clifford Lewis, Jr., of the Yale Corinthian Y.C. has resigned as chairman of the I.C.Y.R.A.'s Dinghy Committee. At this writing the Executive Committee has not filled the vacancy created and there is a report that early graduations of Navy R.O.T.C. students at other institutions may necessitate further changes in the Executive Committee membership before the Spring season.

▶ Commander Clarke Withers, who for the past two years has been the Navy's sailing coach, has succeeded Commander W. P. McCarthy as officer-representative-for-sailing at Annapolis and may retire from active coaching of the Midshipmen's sailing team.

▶ Ensign Charles E. Johnson, Coast Guard '44, who participated in a few Inter-Collegiate Y.R.A. events as a crew when Norman Horton was the Academy's Star Class ace, was killed in a plane accident at Dutch Harbor, Alaska, on December 1.

FLORIDA TRADE WINDS

By Vivyan Hall

▶ The 90-foot stern-wheel houseboat *Silver Wedding*, which Thorne Donnelley had Merchant Fowler build for him at West Palm Beach four years ago, is in the Army and being used on Lake Worth.

▶ The 56-foot auxiliary schooner *Tigress* has completed her Coast Guard patrol duties and has been returned to Frank Gelder, of Miami. The Coast Guard has also returned the 47-foot motor cruiser *Lucky Len II* to L. A. Young, of Detroit. Fred M. Temple, of Toledo, who formerly owned the Q class *Siren* and the 8-Metre *Warrior*, has bought the 45-foot schooner *Moonraker* from Delavan Downer, of Mantoloking, N. J. As Lt. Temple is with the Army Air Force in England, his father, L. E. Temple, is sailing the schooner to their winter home at Harbor Island in the Bahamas.

▶ Derek Wheway, who raced his half-rater at the Royal Carnarvon and Pembroke yacht clubs in Wales, has finished his training at the Opa Locka Naval Air Station. Now a fighter pilot in the Royal Naval Air Arm, he looks to the time he can cruise the Dalmatian coast in a 12-ton ketch he has his eye on. Ernest Fay, of Houston, who has finished training at the subchaser school, now commands his own DE. John W. Stedman, of New Bedford, who has sailed in Bermuda and transatlantic races, is preparing for duty on the DEs. Also at the subchaser school are Lt. Paul C. Nicholson Jr., who sails his sloop *Blue Fin* out of Bristol, and Lt. Robert Carrick, who raced in the Star class at Larchmont. Russell Grove, who based his Bay Bird at the Biscayne Bay Yacht Club, is now with the Bureau of Ships.

▶ The boatyard at Lantanna has been sold by Clive Merchant to James A. Adkinson, who has been building destroyers with the Consolidated Shipbuilding Corp. at Orange, Texas. The yard will concentrate on the maintenance and repair of pleasure craft and small freight boats. Just put into commission here are R. H. Gallager's *Sophy Jane II* from Huntington, West Virginia, and the motor cruiser *Suitsme*, which E. E. McIntosh has sold to Paul Montcastle, of Knoxville, for use at Fort Lauderdale. At John Rybovitch's boatyard, at West Palm Beach, the owner is carrying on alone as his four sons are in the Army.

▶ The Daytona Beach Boat Works is continuing to build the 110′ SCs for the Navy and is also doing conversion and repair work on many of the Army's fleet of small craft. Now that they are delivering five Liberty ships a month, the St. Johns River Shipbuilding Co., at Jacksonville, has earned the Maritime Commission's "M" award.

The free-for-all race at the Palm Beach Y.C.'s winter regatta was won by J. D. Jacobs' *Fairy Swan* with Alvah Rowe's *Alone* beating out Peter Dodge's *Josie* for second place. In the Snipes, William Netto's *Hawk* and William Nexson's *Ibis* finished first and second. In the Moths, James Erneston's *Skeeter II* led, followed by Richard Myer's *Hornet* and Pat McCarthy's *Revenge*. Bud Thomas' *Ruthless* won the small sail area class, with John Swaringen's *Viking* second and Charles McIntosh's *Swoose* third. The Trinidad Y.C., in the British West Indies, is holding weekly sailing races, with Dr. Harold McLean's 32′ sloop *Trident* holding the lead. Vice-commodore Peter Stout's *Naomi* is in second place. The newly elected commodore of the club is Judge J. H. Smith.

▶ Walter H. Girdler, of Louisville, has bought the 97′ motor houseboat *Josephine* from Allen P. Green, of Mexico, Missouri, renamed her *Windswept*, and is basing her with his fishing cruiser *Windswept Jr.* at the Miami Yacht Basin. Frank O'Brien, of Miami, has bought the 43′ auxiliary yawl *Blue Heron* from Lt. Com. W. L. Cleveland and renamed her *Roma II*. Lawrence M. Holloway has sold the 22′ Pennant class sloop *Claire*, which he had shipped down from New York last year, to Ralph G. Hutchins, of Chicago and Miami Beach.

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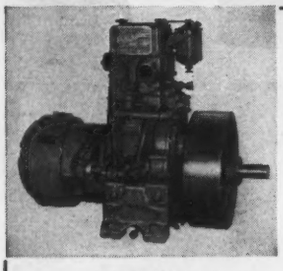

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THE SOUTH SHORE OF LAKE ERIE

By John G. Robinson

▶ George E. Spencer, 1943 vice commodore of the Cleveland Y.C., was elected commodore at the annual meeting of that organization in January. Al J. Salzer was elected vice commodore, and Ray St. John, rear commodore. W. W. Slaght is the new secretary and N. W. Schweicher continues as treasurer. Neville C. Foster is the new fleet captain. Directors elected were George E. Spencer, Al J. Salzer, James C. Heintze, W. W. Slaght and T. E. Steinhart. Committee chairmen include: Alex Winton, Jr., sailing race; Nev. Foster, auxiliary; Dr. Jack Novatney, power boat and club cruise, and Ray Carey, trophy. Jim Van Dorn is club measurer and Harry Killius, sailing yacht judge.

▶ Harry Squires, the man who introduced the Mercury class sailing sloops to Cleveland, is the commodore of the Forest City Y.C. for 1944. E. W. "Whitey" Weir is the new vice commodore and Jerry Doyle, who has chartered the Trivet class auxiliary *Playboy* for 1944, is the rear commodore. J. W. Van den Bosch was elected secretary-treasurer and E. Carlson fleet captain.

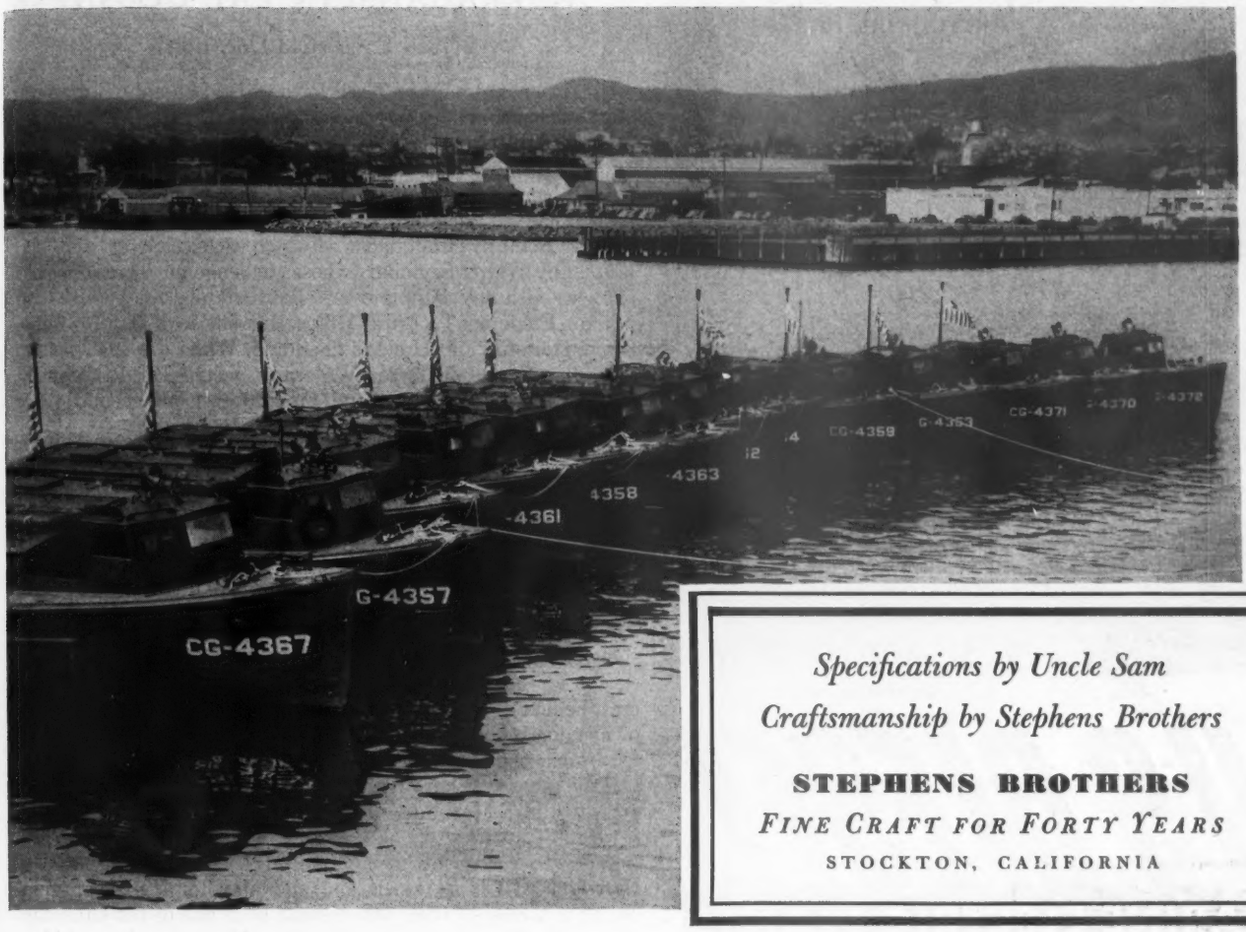
▶ Dr. Roscoe Miller, 1944 commodore of the Vermilion Y.C., has a new idea in club operation which is somewhat of a departure from tradition but which has unlimited possibilities if carried through. Recognizing the burden placed on any one member by asking him to accept the responsibility of entertainment committee chairman for the entire year, the doctor-commodore has sent out letters to the entire membership asking for volunteers to take on the job for one month only. It is thought that by having twelve different chairmen during the year that there may be an increase of social activities and certainly a more widely diversified type of entertainment ideas.

▶ The Grand River Y.C., of Painesville, has elected James Condon commodore for 1944. Tom Parker of Wycliffe, O., is vice commodore, and F. McDowell, of Painesville, rear commodore. Carl Schlusher is fleet captain and Ray Flower, secretary and treasurer.

▶ The Mentor Harbor Y.C. is planning considerable work next spring in connection with harbor improvements. It is planned to have a deeper and wider channel entrance and to replace all the docks on the west side of the lagoon.

▶ Commodore Charles F. Stewart of the Mentor Harbor Y.C. has an exceptionally strong group of committee chairmen for the coming season and prospects are bright for an active year. Charles E. Weitz is chairman of the harbor committee, with Jack R. Allen as vice chairman; Gus Kaercher heads the entertainment committee and J. Howard Morris the sailing yacht race committee. Past Commodore Jim Myers is head of the advisory committee, assisted by R. L. Beymer, R. H. Bostwick and Stiles E. Smith. Other committee chairmen are: John W. Dixon, finance; S. T. Gridley, house; C. R. Newpher, membership; Hal Kneen, publicity; Dave R. Schoales, reception; Thomas H. Jones, rules and regulations, and S. C. Smith, safety. Herbert P. Bailey is fleet captain with Dr. P. A. Davis, power fleet captain; Harold F. Seymour, sail fleet captain; Dr. A. F. Compton, fleet surgeon and Phil Gaennslen, fleet measurer. Captains of the various racing fleets are: Lightnings, Homer C. Smith; Interlakes, R. W. Cornell; Snipes, Wilbur D. Prescott; Great Lakes 21's, Jim Myers; and auxiliaries, Lester Sears.

▶ The annual American and Canadian Sportsmen's Show will be held at Public Auditorium, Cleveland, on March 18 to 26, inclusive. Each year this show attracts a large number of boat owners but exhibits of boats have been extremely limited. This year, with no new boats available for exhibition purposes, the management has the brand new idea of a Used Boat Mart. The necessary amount of space will be allotted to anyone who wishes to sell his boat and no charge will be made unless the boat is sold and in that case the owner will pay a percentage of the sales price.



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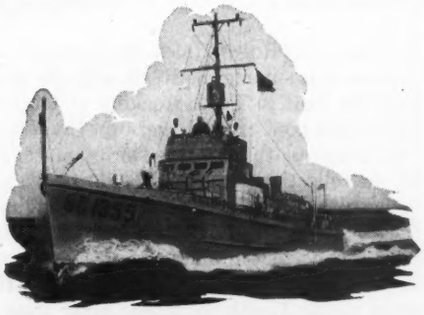

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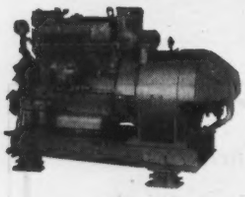

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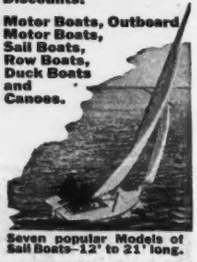

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NARRAGANSETT BAY GOSSIP

By Jeff Davis (Old Doc, rtd.)

▶ The Barrington Y.C. Tired Fathers held an annual meeting and decided to make 1944 a longer sailing season than ever before: they're going to sail two series of 16 races each instead of 12, and begin Sunday, June 4. LaVerne A. Matthews was elected commodore and David A. Pepperell secretary and treasurer. And they're planning to branch out. Yep, going to have a "Scrappy Granddad's" division with a charter list of six, headed by Walter Seymour (whose challenge for a race or series of races with any Pappie over 70 still stands but has had no takers), Frederick T. (Fritz) Moses, Russell Field, Don Robbins, Orrin Thurston and Howard Gladding. When the 1943 season loot was passed out, Byron Waterman accumulated three first prizes, Russell Field two, and Fred Mason one second; Ray Colley three thirds and Harlan Moses one fourth.

▶ We're getting some of the boats that were loaned to the Coast Guard back. C. B. Rockwell's *Belisarius* and Al Stearns' schooner *Mohawk* were returned to Newport and are now berthed in slips at Harris and Parsons' at East Greenwich, and Doug Paton's *Olympic*, Walter Winter's *Mildred*, Clarke Mays' *Sunshine* and Lieut. Governor Cappelli's *Kaylou* are at Pierce and Kilburn's at Fairhaven. None of them looks as she did before she went to war but that's to be expected. As far as I know, except for government stuff, there are only three good sized craft being built in the State, and only one of them is a yacht the owner doesn't want as long as the war is on. The others are fishermen, one 80′ dragger at Lemos' yard at Bullock's Point and the other at Wharton's at Jamestown is a 65-footer that will operate out of Menemsha Bight at Martha's Vineyard.

▶ The "S" boat owners organized the Narragansett Bay Herreshoff S Class Association, and plan for a big summer, racing in a class of their own instead of in one of the handicap classes. The S's measure into Handicap Class C and raced in it last summer when there were only two or three of them, but when the flock increased to half a dozen, they scared all the other class C boats into staying home on race days, and had the class to themselves, only "twarnt legal," so this year they're going to make it so. Russell Boss was elected president, Frank Hodges vice president and Alden Walls secretary-treasurer.

▶ The Narragansett Bay Power Squadron has started a class in piloting at the Boys' Club at Fall River. Ten passed the examinations at the close of the piloting class at Newport.

▶ *Short ends.* Roger Hale's boy Ted will sail the Yankee Dory *Wetasse* this summer as Roger came as near as possible to putting the boat in Ted's stocking at Christmas. Anyway, she's Ted's boat now. Since Roger brought *Wetasse* into the Bay he's been accumulating Yankee Dories, but as fast as he's found one for his collection someone has always wanted to buy it, so now he hasn't any for himself. But he's bought another power boat, the 40′ *Chiquita*, from Alfred Whitehead and sold his auxiliary yawl *Yanda* to Whitehead. And he's changed the name of his 32′ cruiser *Whim* to *Spindrift*. . . . Bob Hale has changed the name of his Matthews motor sailer from *Friar Tuck* to *Lone Gull*. . . . Albert Lemos has sold his auxiliary sloop *Bluebird* and bought the 26′ Wheeler sport fisherman *Hi-Lo-Jack* and is changing her to a double cabin cruiser. . . . Robert A. Tripp, of Barrington, has bought the 60′ *Sally Ann* from William Edgar John and Associates. . . . Two fishing boats have changed hands, the 45′ trawler *Genevieve D* from Joseph S. Dolan, Jr., of Guilford, to Paul Browning, Edgar Clark and Donald Anderson, of Slocum; and the 33′ *Greyhound* from Yvonne B. Authier, of Vineyard Haven, to A. H. Siple, of Warwick Neck. . . . H. Leroy Burnside has been appointed fleet surgeon and Harold B. Sawyer librarian of the Rhode Island Y.C. . . . The Narragansett Bay Y.A. re-elected H. R. Norgaard, president; Raymond Colley, vice president; William T. Bailey, secretary; Jeff Davis, race record secretary; William Moody and Leon Nickerson, delegates at large; Dr. Terrell E. Cobb, power boat representative and W. Russell Boss, sailing craft representative.

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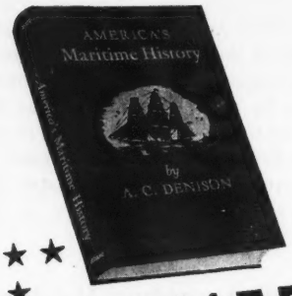

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NEWS OF THE INDUSTRY

BOATING INDUSTRY GEARED FOR PEACETIME PRODUCTION

▶ "Although the small boat industry is still fully engaged in its tremendous task of supplying innumerable types of boats, engines and marine equipment to our armed forces and those of our Allies," reports Ira Hand, Secretary of the National Association of Engine & Boat Manufacturers, "war contracts now amount to well over a billion dollars, an estimate that does not even attempt to include the engine and accessory branches of the industry. Should 1944 mark the collapse of the Axis, however, the industry will find itself in an enviable position. From the first day of peace, our industry will find itself virtually without a serious problem of conversion or re-tooling. When the last shot echoes, the ways, engines, testing blocks and fabricating machinery of the boating industry will merely resume their peacetime functions — producing boats for recreational purposes.

"Recently the Research Institute of America placed the recreational boating industry at the top of the durable-goods category in a series of post-war predicted percentages of increases over 1940 of anticipated expenditures by groups of commodities in 1946. Boating led with 176 per cent. The U. S. Department of Commerce, in a report called *Markets After the War*, estimates a 233 per cent increase for the recreational boating industry in 1946, when compared with 1940, based on 1942 prices."

IN THE NEWS

▶ John W. Mulford, president of the Gray Marine Motor Co., has been elected to the Executive Committee of the National Association of Engine and Boat Manufacturers. . . . M. K. Lebohner has been appointed sales manager of the Fiwale Equipment Manufacturing Co. Their executive offices and warehouse are now located in the Rollfast Bldg., 165 Church St., New York. . . . Roger C. Bascom has joined the technical service staff of the Hycar Chemical Co. . . . The Bellingham Marine Railway and Boatbuilding Co. has been merged with the Bellingham Iron Works. The former will be known as the Marine Division and the latter as the Metals Division. . . . Wm. Edgar John and Associates have launched their 100th 110′ Army cargo barge, and are now well along with their order for thirty-seven barges of the same type. . . . The Gray Marine Motor Co., Diesel Engine Division, has recently released four new sound 16 mm. training films which cover various phases of maintenance of their engines which are powering landing craft and invasion barges.

ON THE PRODUCTION LINE

▶ The Marine Division of the Bellingham Iron Works has been awarded their renewal of the Navy "E" for production excellence. . . . The Gray Marine Motor Co. has received a second star for their Army-Navy "E" flag. . . . More than 30 per cent of the Borg-Warner plants manufacturing war equipment have received Army-Navy "E" awards.

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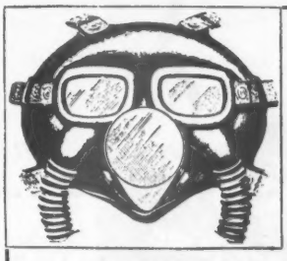

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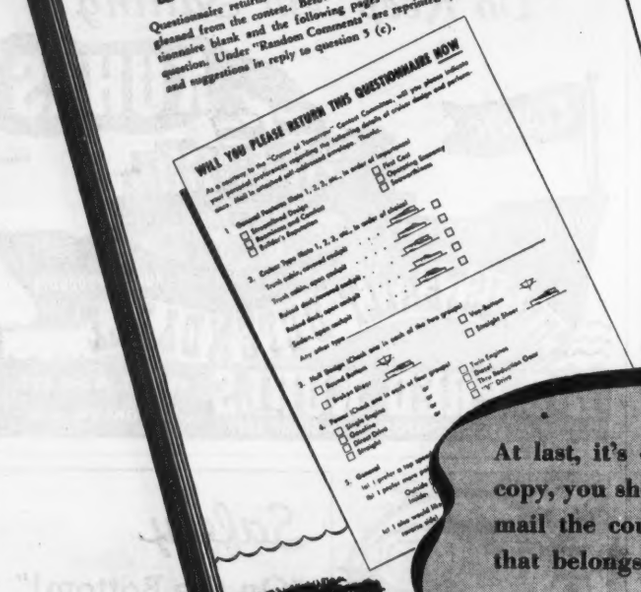
Questionnaire returns were the major source of the specific opinions gleaned from the contest. Below is a reproduction of the actual questionnaire blank and the following pages tabulate the replies to each question. Under "Random Comments" are reprinted typical expressions and suggestions in reply to question 5 (e).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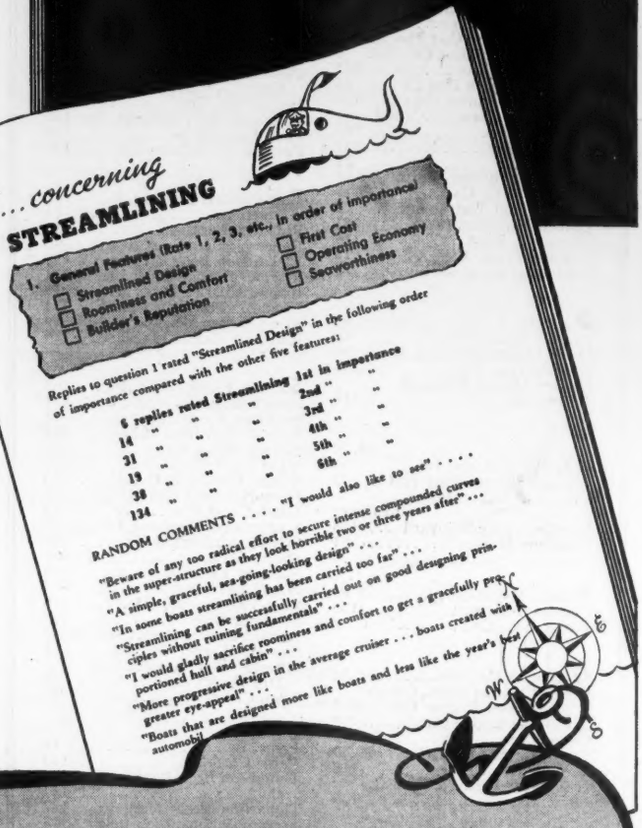
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...pinned down by pillbox on right flank!

★ Landing parties must depend on supporting fire from ships off shore until their own artillery can get into action. By radio communication the Navy's fire is brought instantly to bear on enemy strong points holding up the advance.

When the Marines carry out the tough landing operations for which they are noted, Walkie-Talkies are among the first ashore. ***They must get the messages through!*** For unfailing power, many depend on ***E·L*** Vibrator Power Supplies.

Wherever reliability is a "must," ***E·L*** Vibrator Power Supplies are also proving their other advantages of light weight, small size and high efficiency. They are products of the most extensive research in vibrator power supplies and circuits ever known.

That research has extended the scope and usefulness of vibrator type power supplies beyond all previous conception. Certainly, in the electronic era of peace to come ***E·L*** Power Supplies will contribute new advances and economies wherever electric current must be changed in voltage, frequency or type.

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E·L **ELECTRICAL PRODUCTS**—Vibrator Power Supplies for Communications . . . Lighting . . . Electric Motor Operation . . . Electric, Electronic and other Equipment . . . on Land, Sea or in the Air.

Power Supply using rechargeable, non-spill storage battery for operation of Walkie-Talkie radio equipment. Input Voltage: 4 Volts D.C.; Output: Numerous Voltages, supplying plate and filament requirements of the equipment. Width, 3¼"; Length, 6½"; Height, 4⅜".

The SMOKE before the Battle

Back of this smoke screen waits an Allied invasion fleet—ready to seize the vital beachheads that will tighten the pincers on an enemy at bay ... opening another entrance into Axis territory.

Once again the little Vosper motor torpedo boats of His Majesty's Navy are called upon to lead the way into battle—protecting sister ships a hundred times their size.

It takes stamina not only in men but in engines to carry out successfully such a courageous assignment. That is why, today, many of the M. T. B.'s of the Allied navies are equipped with the most powerful gasoline marine engine in the world—the Sterling Admiral (Vimalert design).

And the endurance records which these new Admirals have run up on the seven seas are previews of what you can expect in your Sterling post-war engine for marine or industrial use.

To fulfill wartime requirements, we have evolved new methods and new techniques for building precision-engineered engines on a mass production basis. So expect your next Sterling engine not only to be even more dependable, but also more economical to purchase and to operate.

"THE SMOKE AFTER THE BATTLE"—Sterling engines serve industry in a thousand ways. Typical are many of our cities' fire boats with both generators and pumps Sterling powered. When the smoke of battle has vanished they will again be available for marine and industrial applications.

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